RICOH

# REPAIR MANUAL
# AND
# REPAIR PARTS

# KR-10M

RICOH COMPANY LTD.

## INDEX

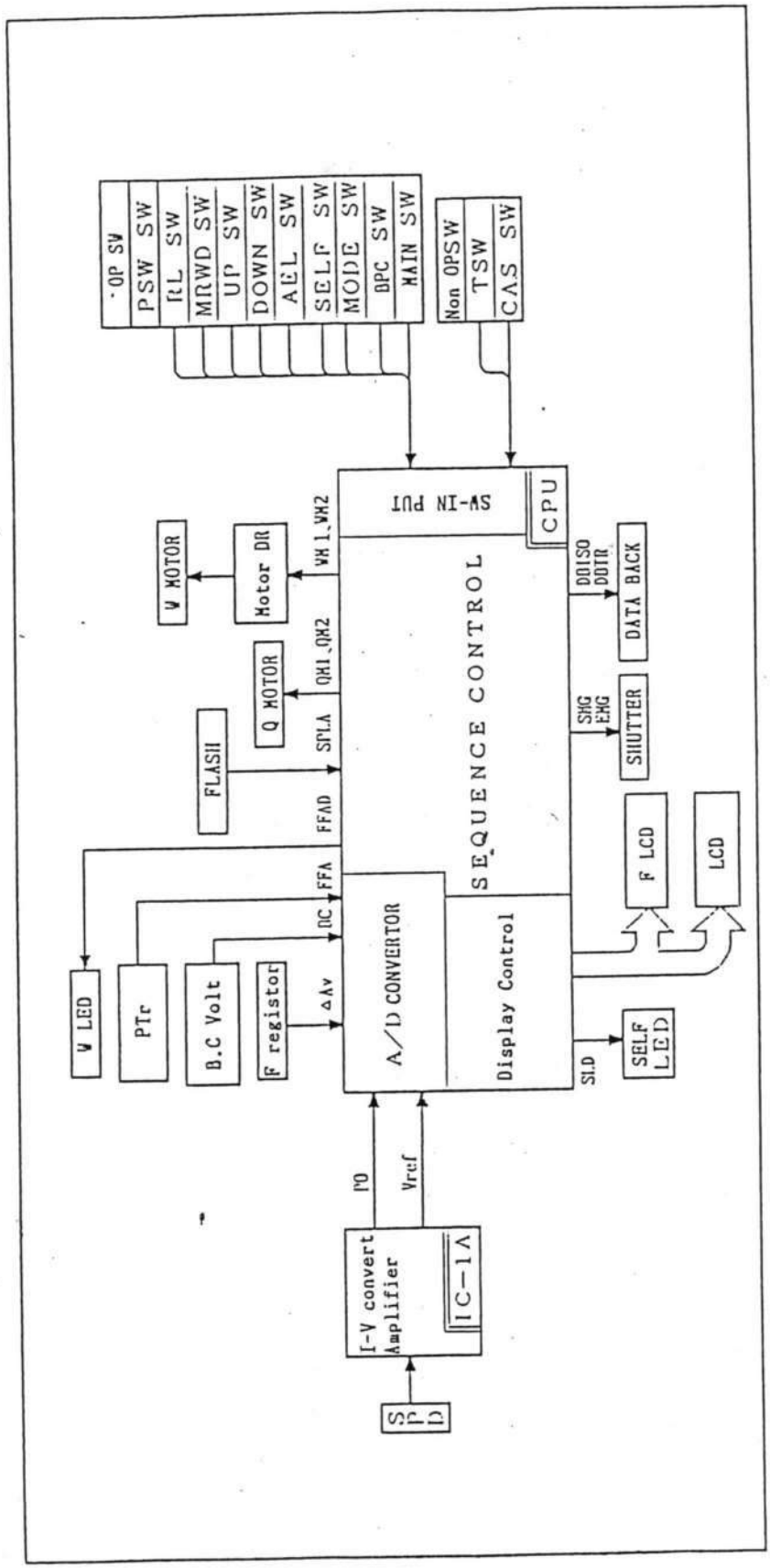

1. SPECIFICATIONS ..... 1
2. BLOCK DIAGRAM ..... 2
3. POWER SUPPLY SYSTEM DIAGRAM ..... 3
4. CONSUMPTION CURRENT ..... 4
5. DISASSEMBLING ..... 5
    1. FLOWCHART(MAJOR COMPONENT PARTS) 5
    2. DISASSEMBLING 6
        1. Fresnel lens 6
        2. Bottom cover 6
        3. Top cover 6
        4. LCD 7
        5. CPU PCB 7
        6. SPL plate 8
        7. Eyepiece frame 8
        8. AEFPC 8
        9. F LCD U 9
        10. Prism 9
        11. Upper base plate 9
        12. Front cover 10
        13. Mirror Box U 10
        14. Shutter 10
        15. W motor 11
        16. Bottom base plate 11
6. ASSEMBLING ..... 12
    1. MIRROR BOX SUB ASSY 12
        A. Mirror Box : Right 12
        B. Mirror box : Left 13
    2. Bottom base plate 14
    3. Shutter 14
    4. Mirror Box U 15
    5. Upper base plate 16
    6. Prism 17
    7. F LCD U 17
    8. AE FPC 18
    9. CPU PCB 19
    10. Front cover 20
    11. Bottom cover 20

7. ADJUSTMENT
A. ADJUSTMENT WITH SET IN TEST MODE 21
1. AE 21～22
2. FFA 21～22
B. MECHANICAL ADJUSTMENT 23
1. Position of FLCD 23
2. Finder focusing 23
(Memo) 24
8. PARTS SKETCH AND INDEX ····· 25
A. 25～26
B. 27～28
C. 29～30
D. 31～32
E. 33～34
F. 35～36
9. PARTS LIST ····· 37～40
10. SCHEMATIC DIAGRAM/DATA BACK ····· 41
11. ELECTRONIC PARTS
1. CPU PCB/Parts arrangement (Top view) 42
2. CPU PCB/Parts arrangement (Bottom view) 43
3. CPU PCB/Terminal name (Top view) 44
4. CPU PCB/Terminal name (Bottom view) 45
5. AE FPC/Schematic diagram 46
6. AE FPC/Parts arrangement 47
7. AE FPC/Terminal name 48
8. DV FPC/Schematic diagram 49
9. DV FPC/Parts arrangement 50
10. DV FPC/Terminal name 51
12. WIRING DIAGRAM ····· 52
13. SCHEMATIC DIAGRAM ····· 53

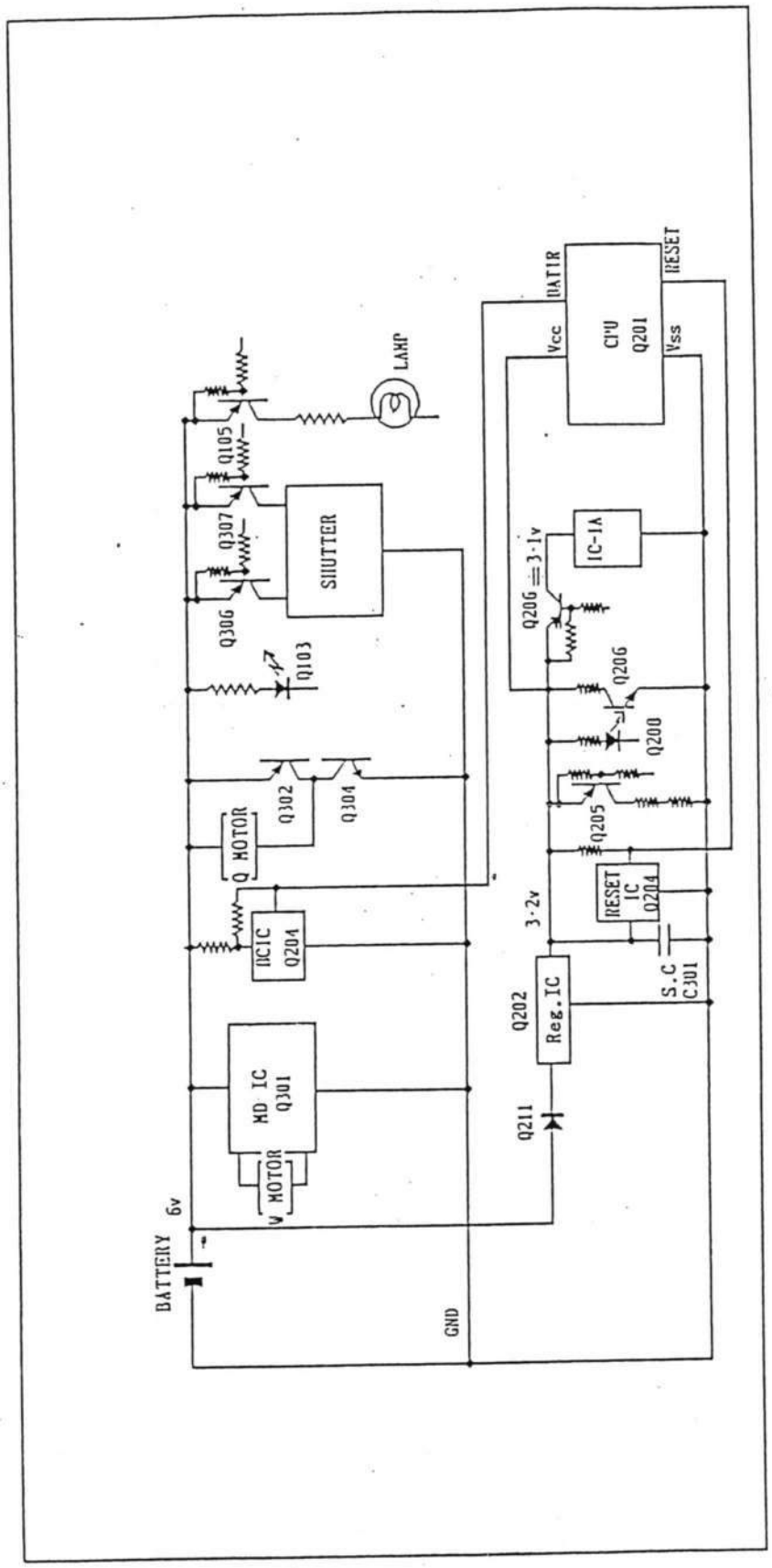
## 1. SPECIFICATIONS

| | |
|---|---|
| Type | : 35mm SLR with focal plane shutter |
| Film Format | : 35mm film, 24×36mm |
| Lens Mount | : Ricoh K mount |
| Shutter | : Electrically controlled, vertically moving focal plane shutter |
| | Automatic: 32sec. to 1/2000sec. |
| | Manual : 16sec. to 1/2000sec. |
| Self-timer | : Operating time 10sec, with LED blinking |
| Viewfinder | : Field of view covers 91% holizontally and vertically |
| | Magnification: 0.80x(with F1.4/50mm standard lens) |
| Viewfinder Display | : AE lock, exposure compensation, underexposure mark, |
| | overexposure mark, shutter speed, flash ready indicator |
| Focusing | : Diagonal split-image spot in microprism band |
| Exposure Metering system | : TTL full open metering system |
| Exposure Coupling Range | : EV 0～18 |
| Film Speed | : DX auto (ISO 25～5000), ISO 100 with Non-DX film |
| Flash Terminal | : X synchro contact on the hot shoe |
| Exposure Compensation | : Exposure adjustment system (+4to−4 in 1/3 increments) |
| Film Loading | : Ricoh Auto-Load system. Automatic 1st frame setting |
| Film advance | : Automatic with a built-in motor (approx. 2frames/ sec.) |
| Film rewind | : Automatic reverse at the end of film. Manual rewind is possible |
| Back cover | : Removable |
| LCD Display | : shutter speed, film advance, film lo ded, exposure counter, |
| | exposure compensation, multi-exposure, continuous shooting mode, |
| | Auto-bracket, Battery mark |
| Other Features | : Terminal for Data-Back, 30sec. timer, Remote socket |
| Power Source | : Four AA batteries (Ni-Cd is available) |
| Dimensions | : 151(W)×91(H)×56(D)mm |
| Weight | : 490 g (body only without battery) |

## 2. BLOCK DIAGRAM



# 3. POWER SUPPLY SYSTEM DIAGRAM



## 4. CONSUMPTION CURRENT

Specifications: 6.5V±0.5V

(1) When Main SW is OFF: 30μA max

(2) WHen Main SW is ON: 120μA
(CPU stops)

(3) When light is measured: 17mA (max 27mA)

(4) When light is measured: 62mA (max 72mA)
(Lamp, Self LED are ON)

However, backup capacitor charge current is not contained, The following values are guidelines for consumption current and not specifications,

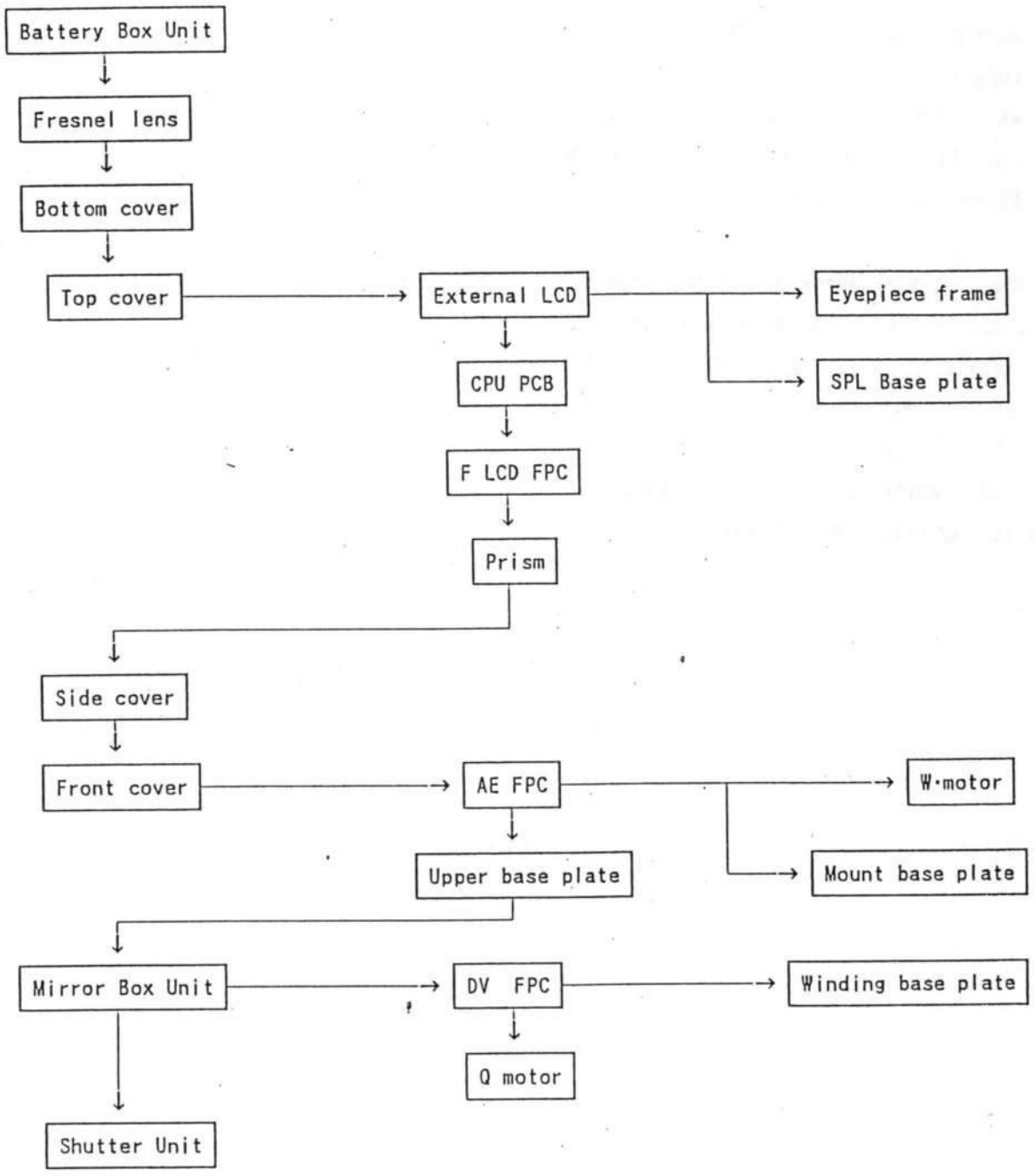
(1) When Q motor is operating: 60±10mA
(mirror up)

(2) When Q motor (mirror down)
and W motor are operating: 0.8A

(3) During rewinding: 250mA

## 5. DISASSEMBLING

### 1.FLOWCHART(MAJOR COMPONENT PARTS)



## 2. DISASSEMBLING

※ Please remove the Battery box before disassembling.

1. Fresnel lens (Fig.1)

   (1) Take off two SCREWS (No.1) and remove the HOLDER (No.2), then remove the FRESNEL LENS (No.3) carefully.

2. Bottom cover (Fig.2)

   (2) Take off eight SCREWS (No.1,2,3) and remove the BOTTOM COVER(No.4).

3. Top cover assy (Fig.3)

   (1) Take off eight SCREWS (No.1～6) and remove the TOP COVER ASSY (No.7).

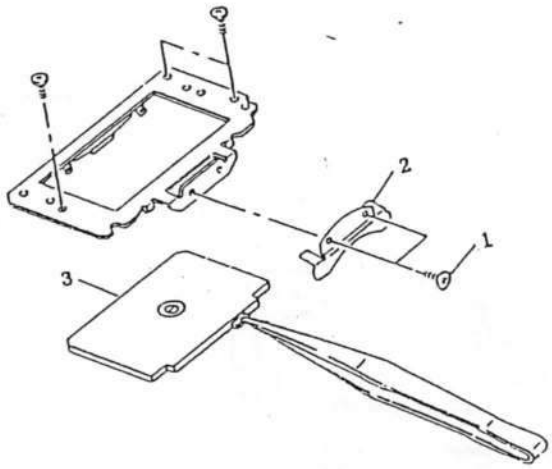



Fig.1

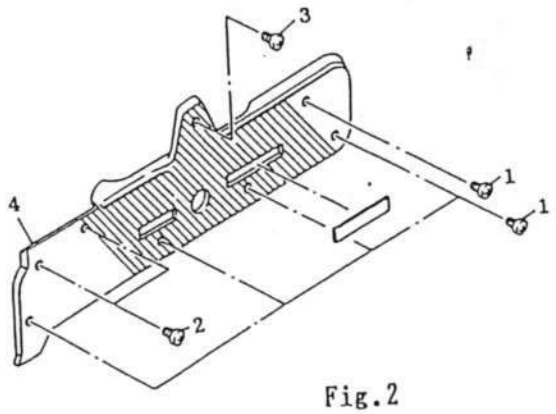



Fig.2

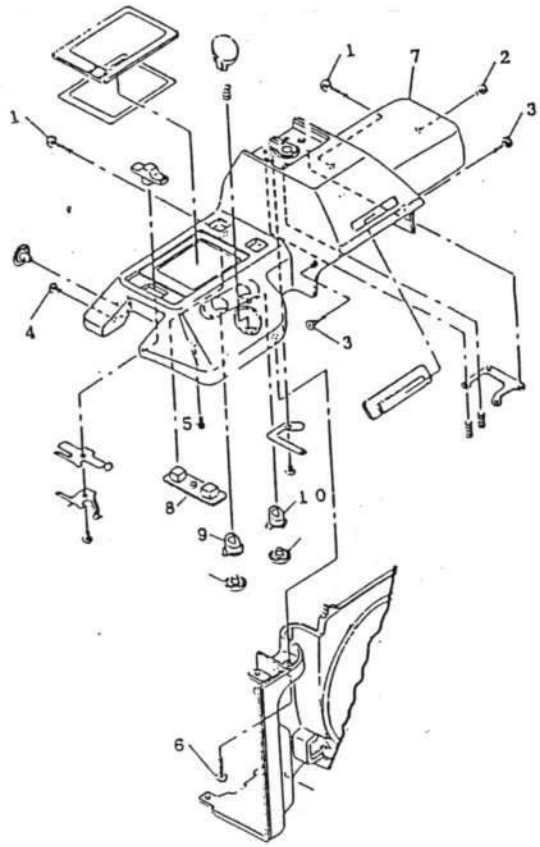



Fig.3

4. LCD (Fig.4)

(1) Take off two SCREWS (No.2) and remove the LCD HOLDER (No.3), then remove the LCD (No.1).

5. CPU PCB (Fig.4,5)

(1) Detach the soldered portion of four LEAD WIRES (Red, Green, Purple, Orange) from the CPU PCB. (Fig.5)

(2) Peel off the AE FPC (The part of )

(3) Take off three SCREWS (No.4~6) and remove the LCD FRAME (No.7)

(4) Take off two SCREWS (No.9) and remove the FPC HOLDER (No.10)

(5) Take off one SCREW (No.12) and remove the RW BUTTON HOLDER (No.13) and the RW SW (No.14), then remove the CPU PCB (No.11)

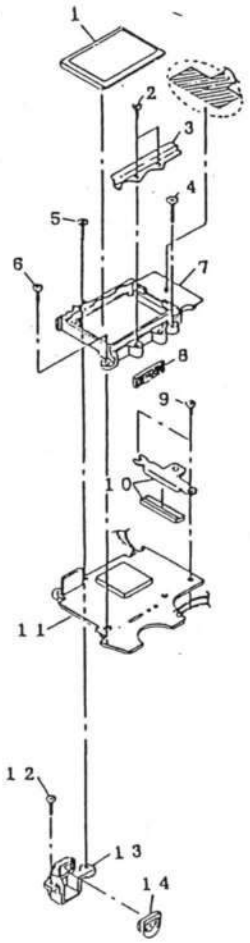



Fig.4

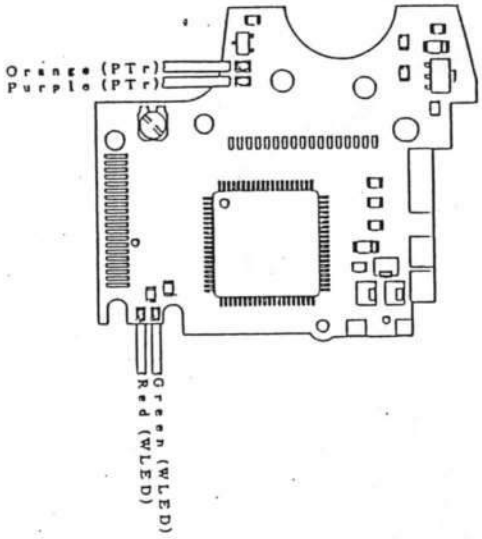



Fig.5

6. SPL plate (Fig.6,6-A)

(1) Detach the soldered portion of three LEAD WIRES (Black, Brown, Orange)from the SPL plate (Fig.6-A).

(2) Take off two SCREWS (No.1) and remove the SPL PLATE (No.2).

7. Eyepiece frame (Fig.7)

(1) Take off two SCREWS (No.1) and remove the EYEPIECE FRAME (No.2)

8. AE FPC (Fig.8,9,10,11)

(1) Detach the soldered portion of two LEAD WIRES (Brown, Blue) from the AE FPC. (Fig.8)

(2) Take off two SCREWS (No.1) of the SPD frame. (Fig.9)

(3) Take off three SCREWS (No.1,2) and remove the COVER LEFT (No.3),(Fig.10)

(4) Take off two SCREWS (No.1,2) and detach the soldered portion of FV FPC, BPC SW, DX CONTACT as shown in Fig.11, then remove the AE EPC (No.3)

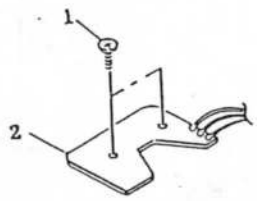



Fig.6

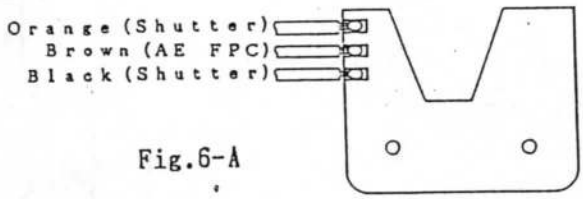



Fig.6-A

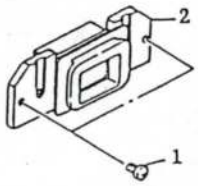



Fig.7

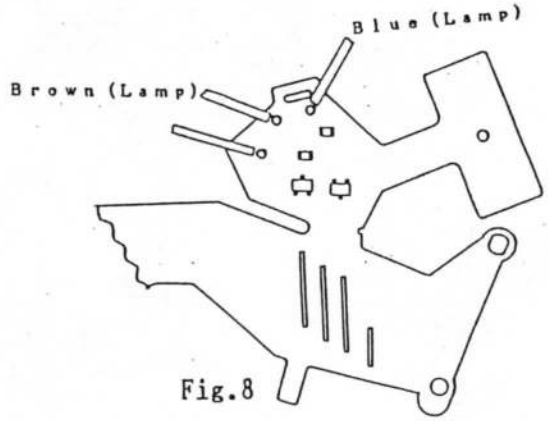



Fig.8

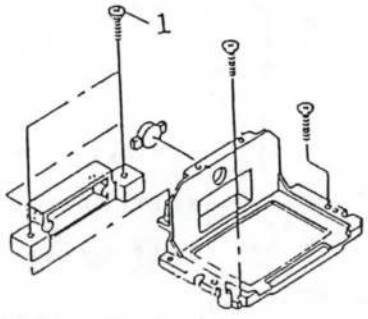



Fig.9

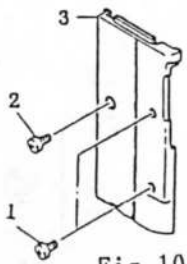



Fig.10

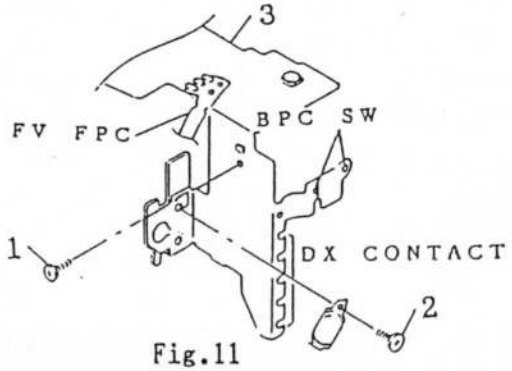



Fig.11

9. FLCD U (Fig.12)

(1) Take off two SCREWS (No.1) and remove two SPRINGS (No.2), then remove the F LCD U (No.3)

10. Prism (Fig.13)

(1) Take off two SCREWS (No.1) and remove the HOLDER (No.2).

(2) Take off two SCREWS (No.3) and remove the PRISM COVER (No.4), then remove the PRISM (No.5).

11. Upper base plate (Fig.14,15)

(1) Take off two SCREWS (No.1,3) and remove the RL SW HOLDER (No.2)

(2) Detach the soldered portion of DB FPC, SHUTTER FPC, BATT Contact (+,−), W motor (Black,Red) from the DV FPC as shown in Fig.15.

(3) Take off ten SCREWS (No.5～9) and remove the UPPER BASE PLATE (No.10)

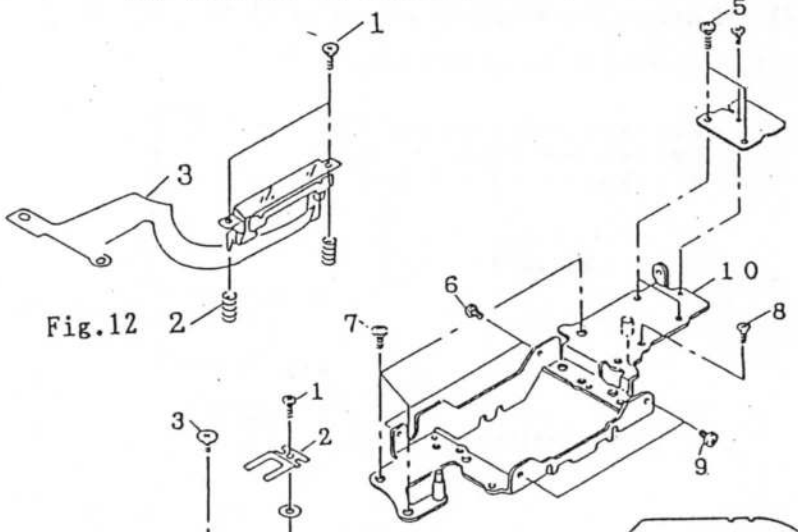



Fig.12

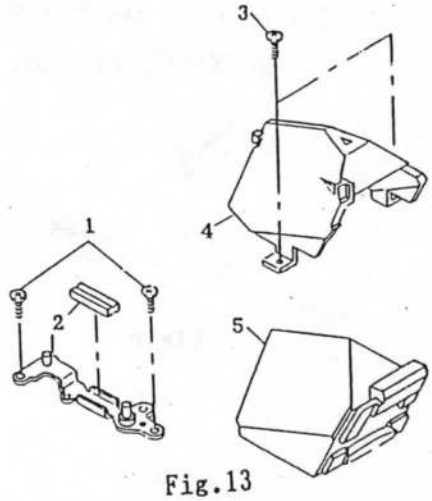



Fig.13

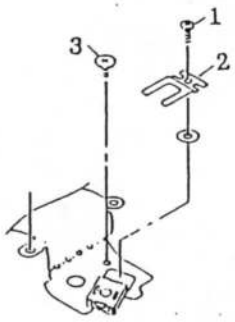



Fig.14

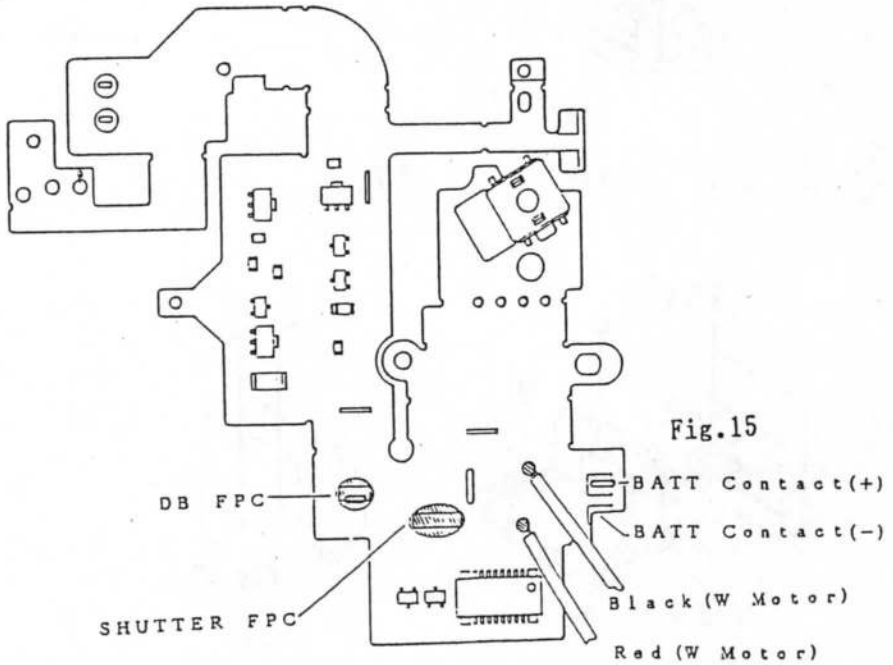



Fig.15

12. Front cover (Fig.16)

(1) Remove the LENS LOCK BUTTON (No.1)

(2) Take of four SCREWS (No.2,3) and remove the FRONT COVER (No.4)

13. Mirror Box U (Fig.17)

(1) Take off one SCREW (No.1)

(2) Take off two SCREWS (No.2) and remove the MIRROR BOX U (No.3) carefully.

14. Shutter (Fig.18)

(1) Take off two SCREWS (No.1,2) and remove the SHUTTER (No.3).

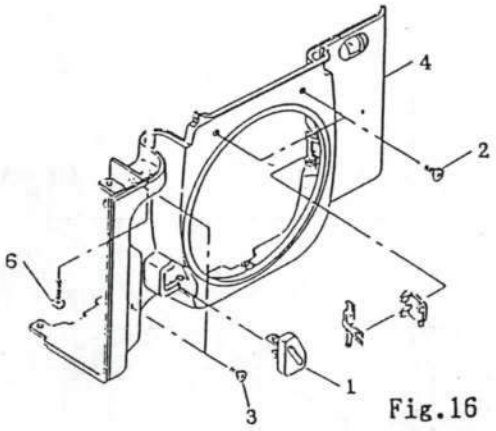



Fig.16

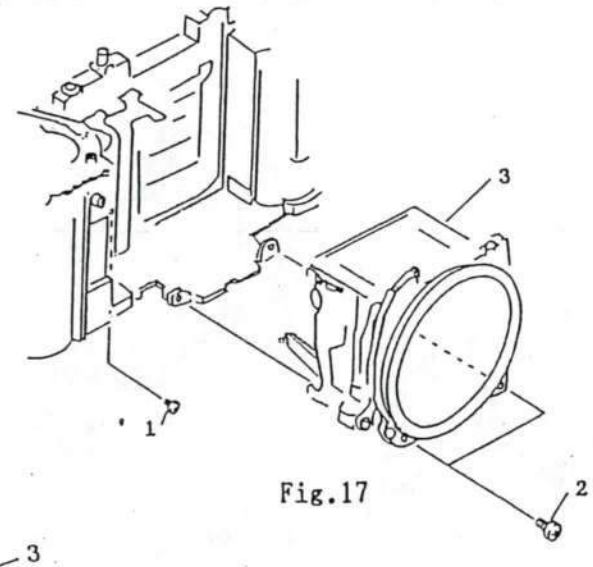



Fig.17

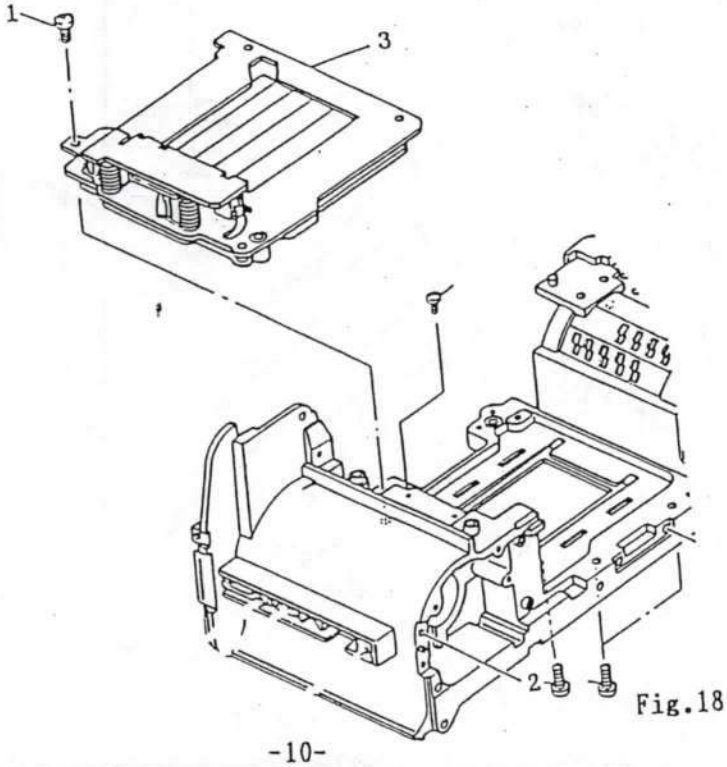



Fig.18

15. W motor (Fig.19,20)

(1) Take off two SCREWS (No.1) and remove the STRAP METAL (No.2) and the LUG PLATE (No.3).

(2) Take off two SCREWS (No.1,2) then remove the BATT. CONTACT(−) (No.3) the PIN HOLDRE (No.4) and the BATT. CONTACT (+)(No.5).

(3) Take off three SCREWS (No.4) and remove the W MOTOR (No.5).

16. Bottom base plate (Fig.21)

(1) Take off three SCREWS (No.1) and remove the M BOTTOM PLATE (No.2).

(2) Take off two SCREWS (No.3) and remove the PLATE (No.4).

(3) Take off eight SCREWS (No.5,6) and remove the M BOTTOM BASE PLATE (No.7)

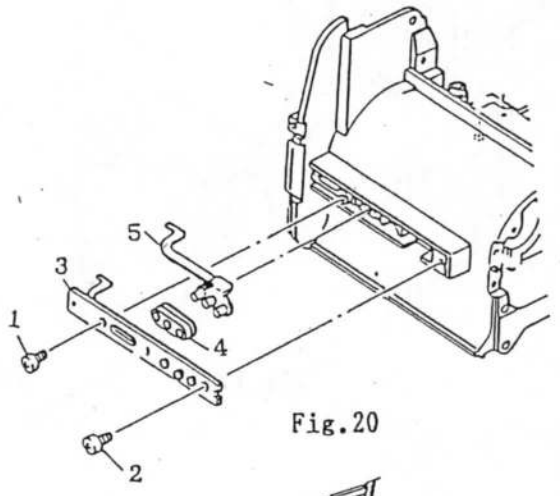



Fig.20

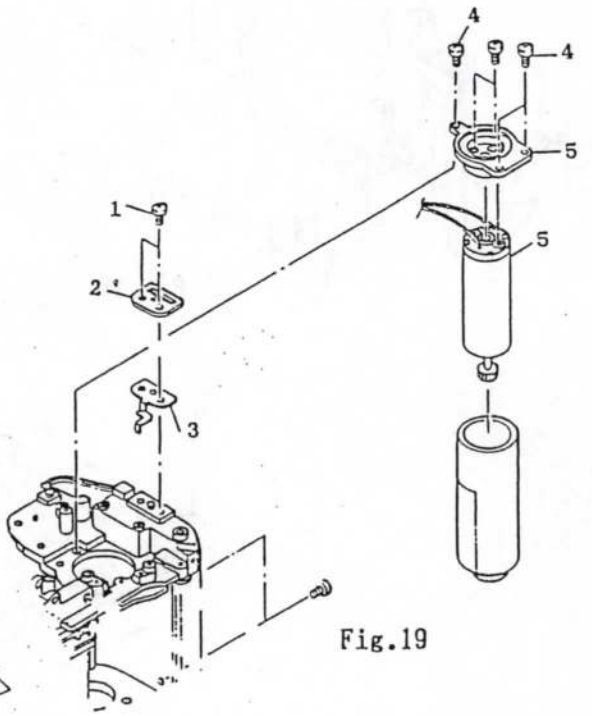



Fig.19

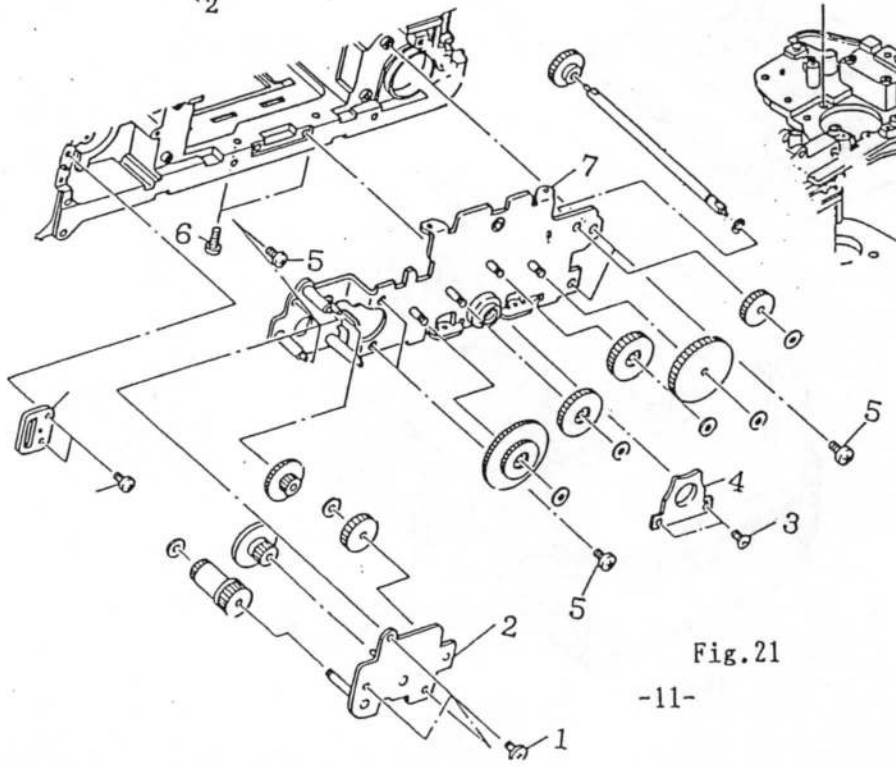



Fig.21

## 6. ASSEMBLING

### 1. MIRROR BOX SUB ASS'Y

A. Mirror Box: Right (Fig.22,23)

(1) Set the Q3 GEAR (No.1) as shown in Fig. 22.

(2) Set the Q CAM GEAR (No.7) and Q CAM (No.6) to the Mirror Box as shown in Fig. 23. (※ The setting holes must be engaged each other)

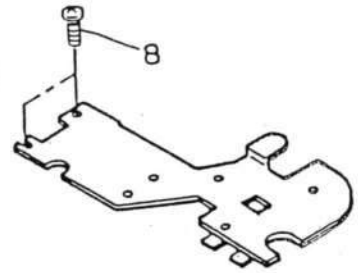
(3) Hook the Q SPRING (No.4).

(4) Set the DIAPHRAGM LEVER (No.5) to the Mirror Box.

(5) Put the S LEVER (No.3).

(6) Set the SW GEAR (No.2) to the Mirror Box.

(7) Put the M SIDE PLATE then tighten two SCREWS (No.8)



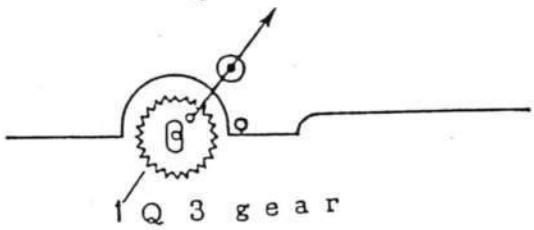




Fig.22

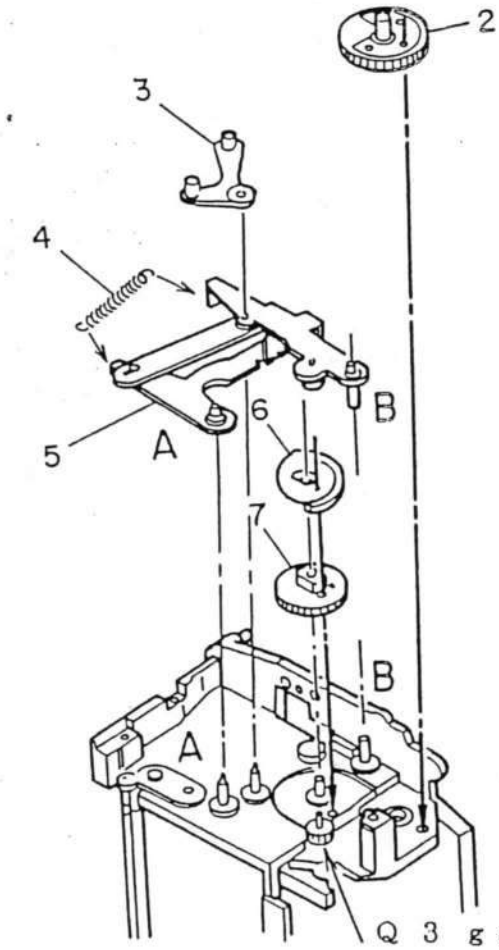



Fig.23

B. Mirror Box: Left (Fig.24)

※ Don't turn any gears of the Mirror Box: Right.

(1) Put the Q1 GEAR (No.4).

(2) Set the Q2 GEAR (No.3) as shown in Fig.24.

(3) Pull up the MIRROR FRAME (No.6) then set the M CAM GEAR (No.2) as shown in Fig. 24.

(4) Put the M SIDE PLATE (No.1) then tighten two SCREWS (No.5).

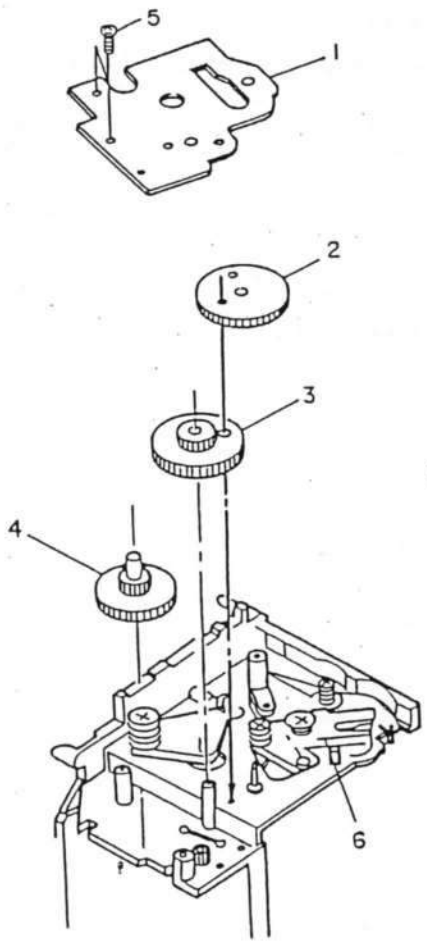



Fig.24

2. Bottom base plate (Fig.25)

(1) Loose the SCREW (No.3).

(2) Put the BOTTOM BASE PLATE (No.1) to the body.

(3) Tighten nine SCREWS (No.2,3,4).

3. Shutter (Fig.26)

(1) Put the SHUTTER U (No.3) to the body and tighten two SCREWS (No.1,2).

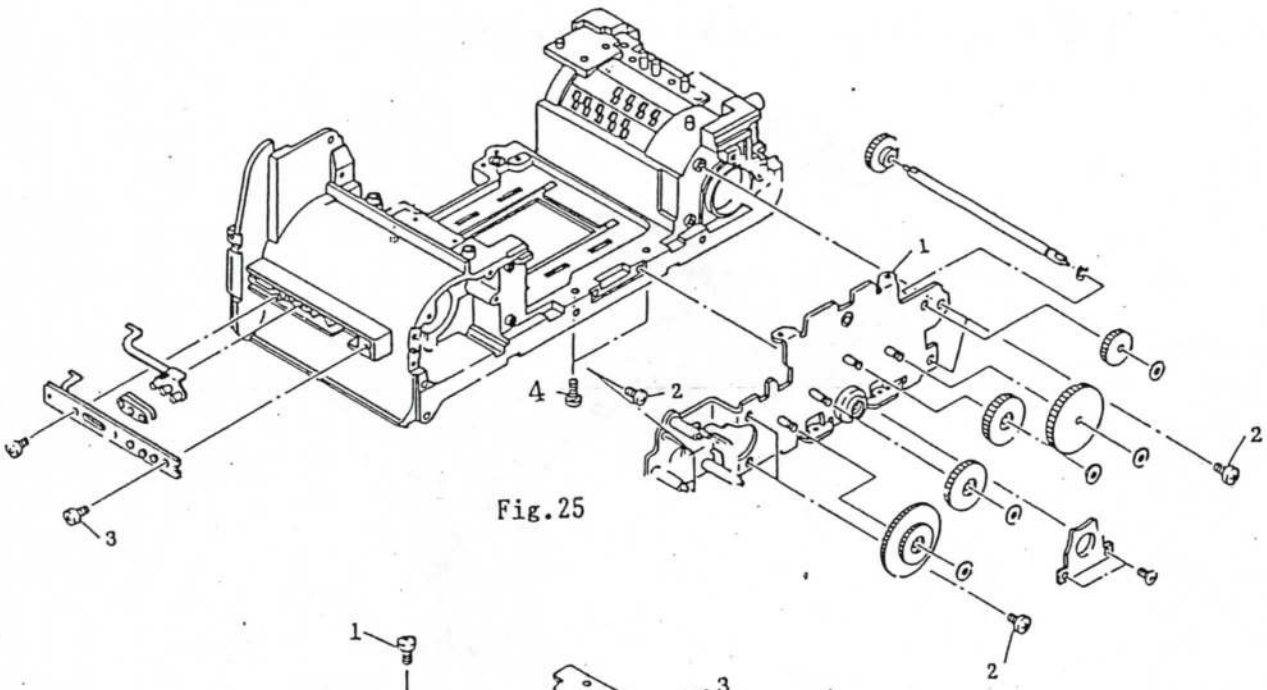



Fig.25

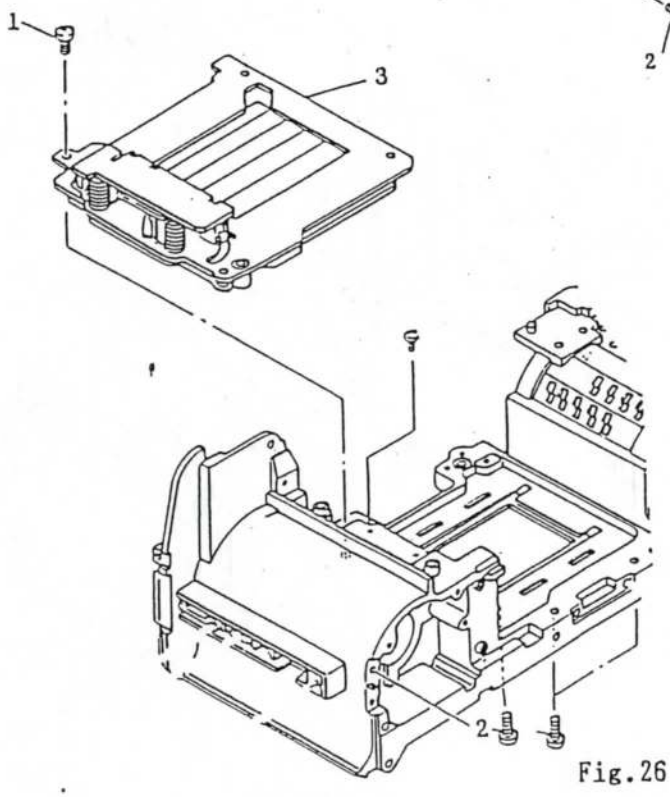



Fig.26

4. Mirror Box U (Fig. 27)

(1) Turn the Q1 GEAR until SET LEVER comes lowest position (mirror up). (Fig.26).

(2) Keep the SET LEVER at lowest position, then mount the MIRROR BOX U (No.3) to the body.

(3) Tighten two SCREWS (No.2).

(4) Tighten one SCREW (No.1) for hold the DV FPC.

※ Please confirm that the Mirror Box is assembled correctly.

① Turn the Q1 gear so that the Shutter blade will be moved.

② If the Shutter blade would not be moved, please disassemble and assemble again.

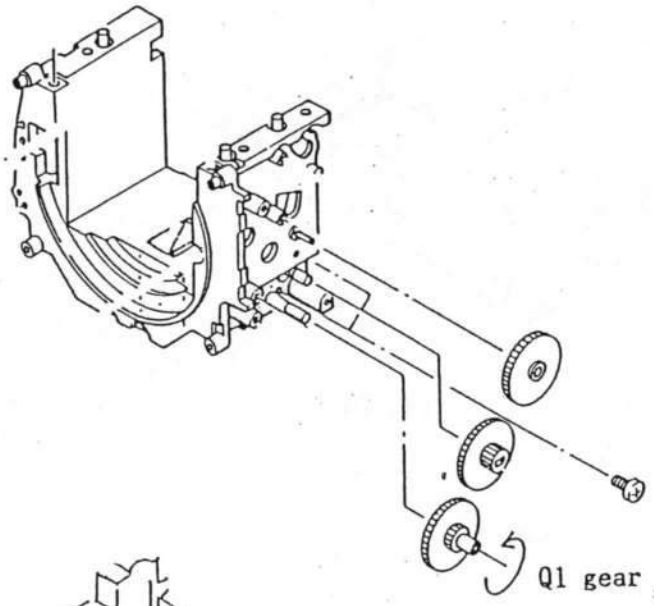
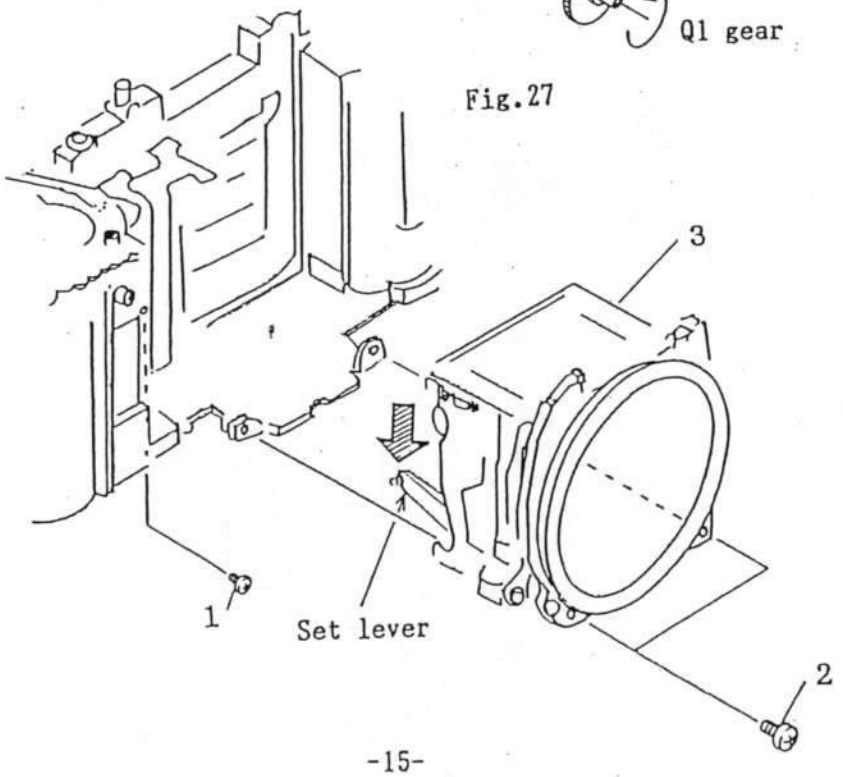



Fig.27



5. Upper base Plate (Fig. 28, 29)

(1) Put the UPPER BASE PLATE (No.10) to the body and tighten ten SCREWS (No.5,6,7, 8,9)

(2) Solder between DV FPC−DB FPC, Shutter FPC, BATT. contact (+,-) as shown in Fig. 29.

(3) Solder two LEAD WIRES (Black, Red/ W motor) to the DV FPC.

(4) Put the FPC holder and set the DV FPC.

(5) Put the RL SW HOLDER (No.2) and tighten SCREW (No.1)

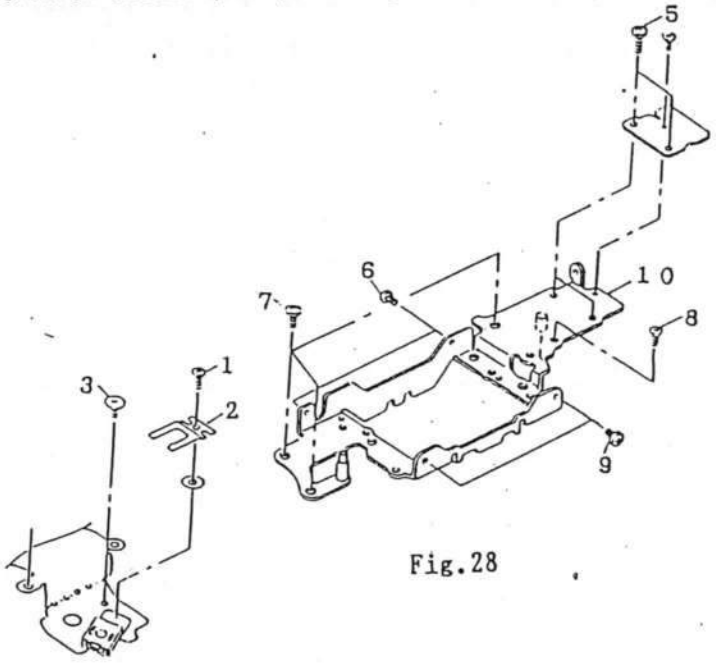



Fig.28

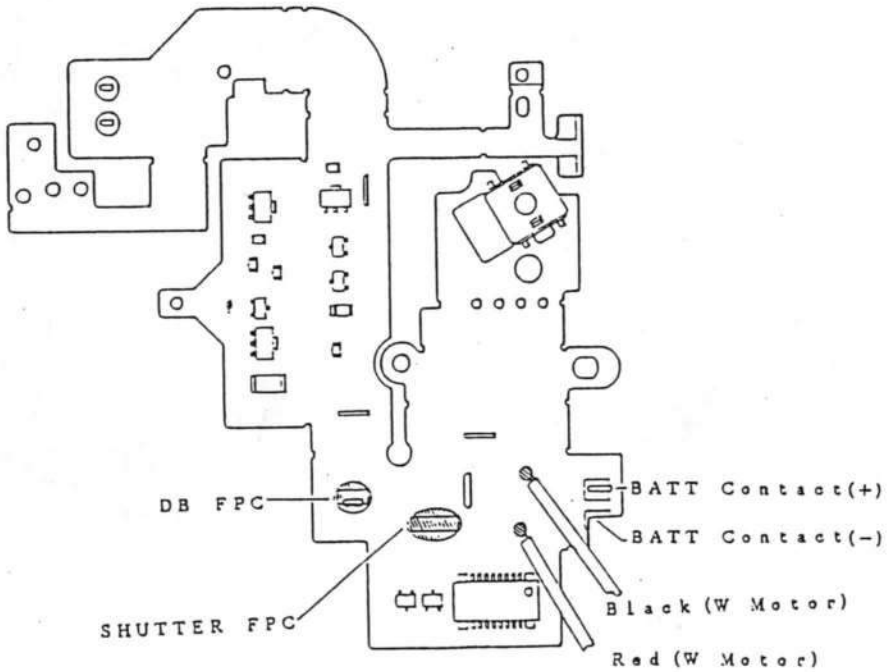



Fig.29

6. Prism (Fig.30)

(1) Put the Prism (No.5) to the PRISM FRAME.

(2) Put the Prism COVER (No.4) and tighten two SCREWS (No.3)

7. F LCD U (Fig.30.31)

(1) Put the FPC HOLDER (No.2) to the body and tighten two SCREWS (No.1)

(2) Set the F LCD U (No.3) to the Mount base plate.

(3) Put the SPRINGS (No.2) and tighten two SCREWS (No.1) temporaly.

※ The position of F LCD must be adjusted, please refer ADJUSTMENT on page 23.

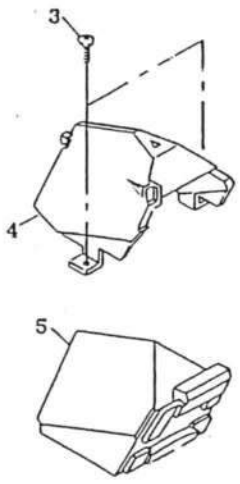
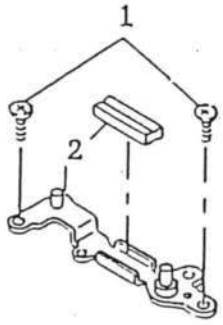



Fig.30



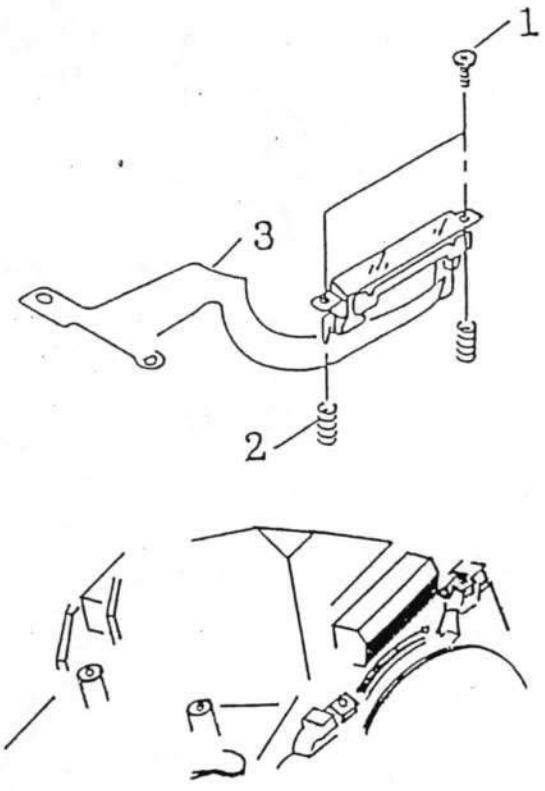




Fig.31

8. AE FPC (Fig.32,33,34,35)

(1) Put the AE FPC to the body.

(2) Solder the portion of the DX CONTACT, BPC SW and the FV FPC.

(3) Tighten two SCREWS (No.1,2).

(4) Put the SPD FRAME (No.1, Fig.33) to the Prism frame.

(5) Solder two LEAD WIRES (Blue, Brown/Lamp) as shown in Fig.34.

(6) Put the LUG PLATE and SPL PLATE then tighten two SCREWS.

(7) Solder three LEAD WIRES (Orange, Brown, Black,/ SPL plate) as shown in Fig.35.

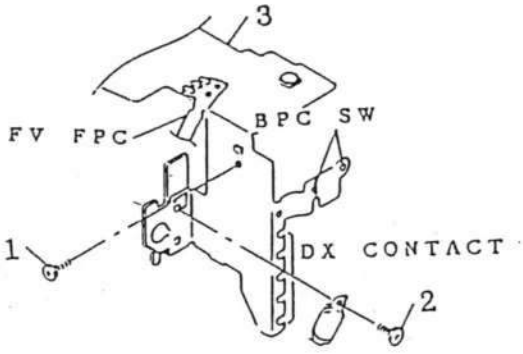



Fig.32

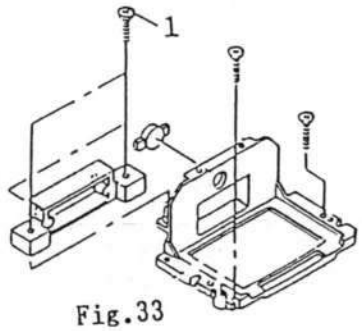



Fig.33

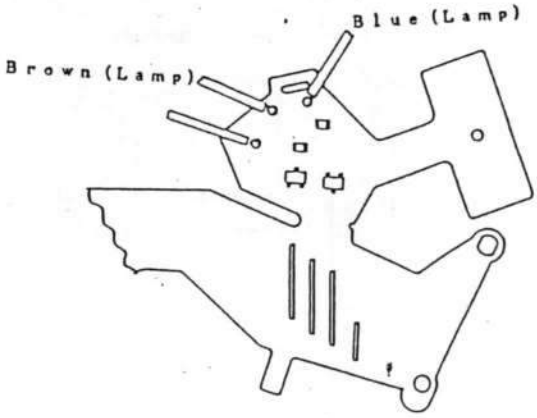
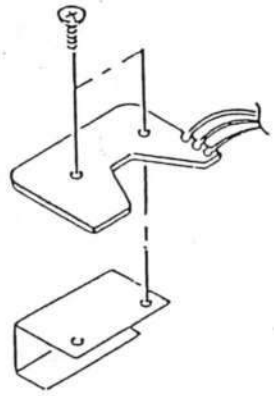



Fig.34



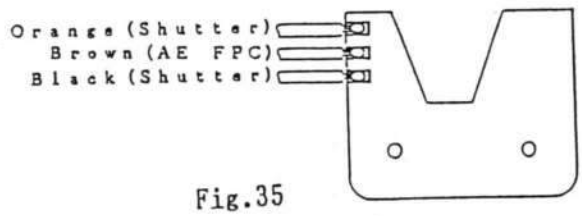



Fig.35

9. CPU PCB (Fig.36,37)

(1) Put the CPU PCB (No.11) to the body.

(2) Put the RW BUTTON HOLDER (No.13), RW SW (No.14) then tighten SCREW (No.12)

(3) Put the AE FPC on the CPU PCB then put the FPC HOLDER (No.10) and tighten two SCREWS (No.9)

(4) Put the LCD FRAME (No,7) on the CPU PCB and tighten three SCREWS (No.4,5,6).

(5) Put the CONNECTOR (No.8) and the LCD (No.1) to the LCD frame.

(6) Put the HOLDER (No.3) and tighten two SCREWS (No.2).

(7) Solder four LEAD WIRES (Orange, Purple/PTr, Red, Green/W LED) as shown in Fig. 37.

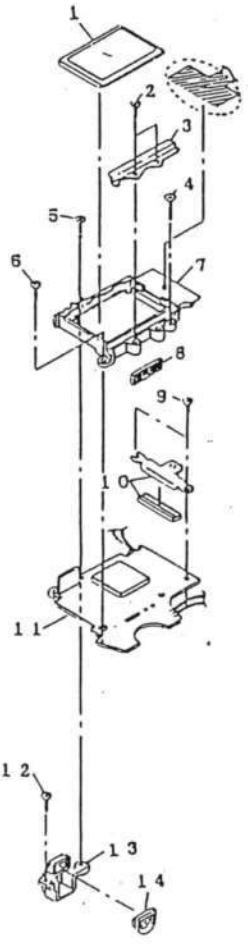



Fig.36

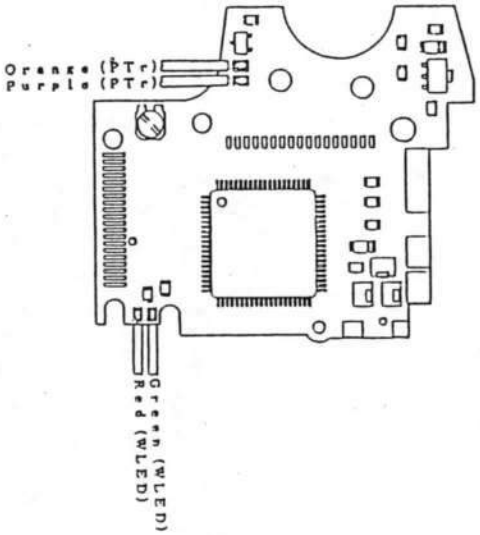



Fig.37

10. Front cover (Fig.38)

(1) Put the FRONT COVER (No.4) to the body and tighten four SCREWS (No.2,3).

(2) Press fit the LENS LOCK BUTTON (No.1).

11. Bottom cover (Fig.39)

(1) Put the BOTTOM COVER (No.4) to the body and tighten eight SCREWS (No.1,2,3).

※ You must proceed to ADJUSTMENT before assembling Top cover.

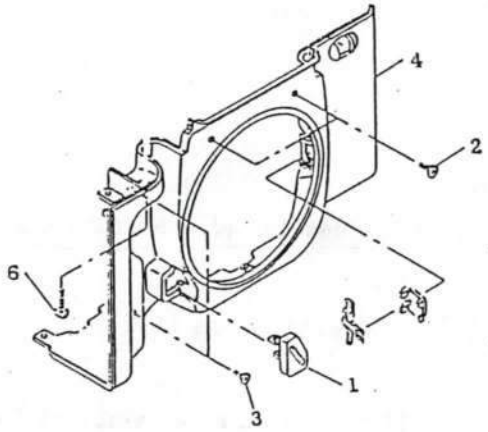



Fig.38

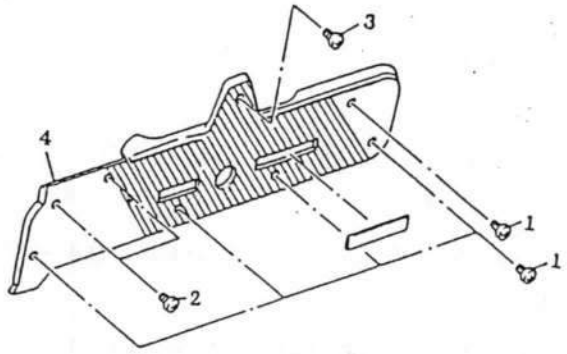



Fig.39

## 7. ADJUSTMENT

A. Adjustment with set in Test mode.

<Setting Test mode>

(1) Solder two portions between GND-TEST terminals of the CPU PCB as shown in Fig.

(2) Attach the Battery box to the camera.

(3) Connect between the RESET terminal-GND for a moment with tweezers and disconnect.
So that the RESET terminal will be set to Low→Hi

(4) Connect between MAIN SW-GND, then Camera will be set in Test mode. (Also LCD display will be turned ON)

### 1. AE

※ Set the camera in Test mode,

(1) Mount the F1.4/50mm lens to the camera. (Any F stop is available)

(2) Set the Brightnoss box at LV12.

(3) Adjust with VR101 until "4E" appears in the LCD.

Note:
If the F1.4/50mm is not available, adjusting values as follow
With F1.7/50mm————————→"50"
F2.0/50mm————————→"53"

### 2. FFA

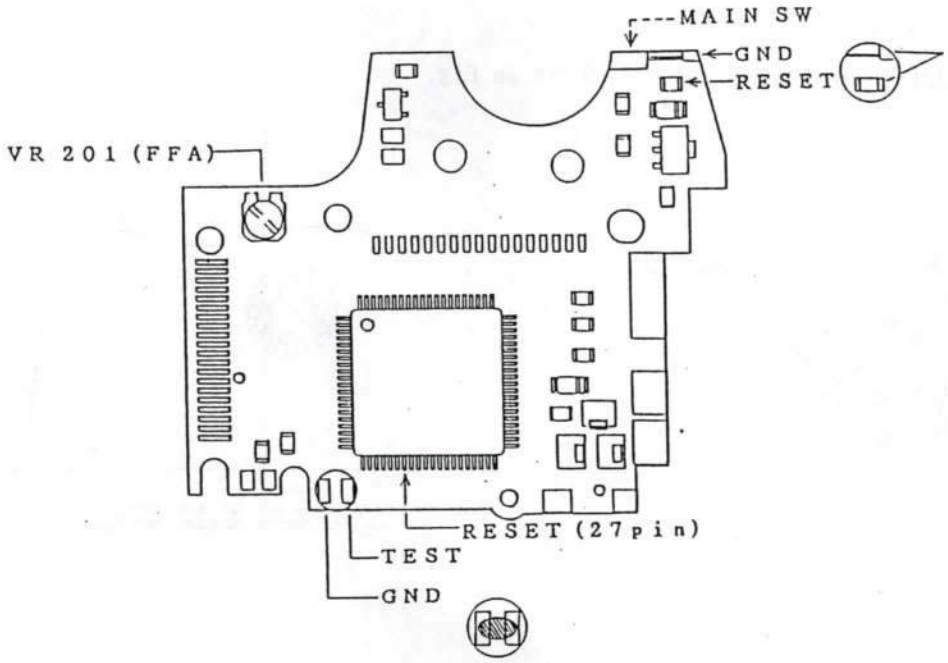
※ Set the camera in Test mode,

(1) Close the Back cover.

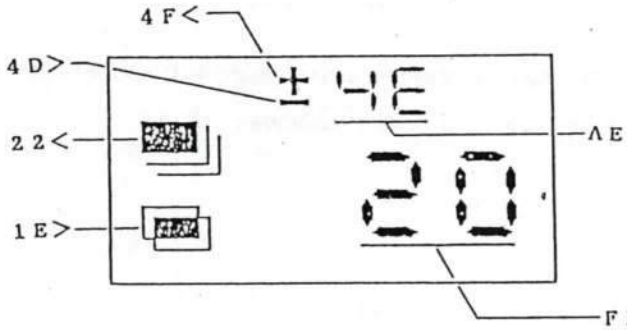
(2) Adjust with VR201 until "20" appears in the LCD.

Note:
When you replacing the CPU PCB, please remove the VR201 from the OLD PCB and put it to the NEW PCB.
(The VR201 and W LED (PTr) are combination used.)

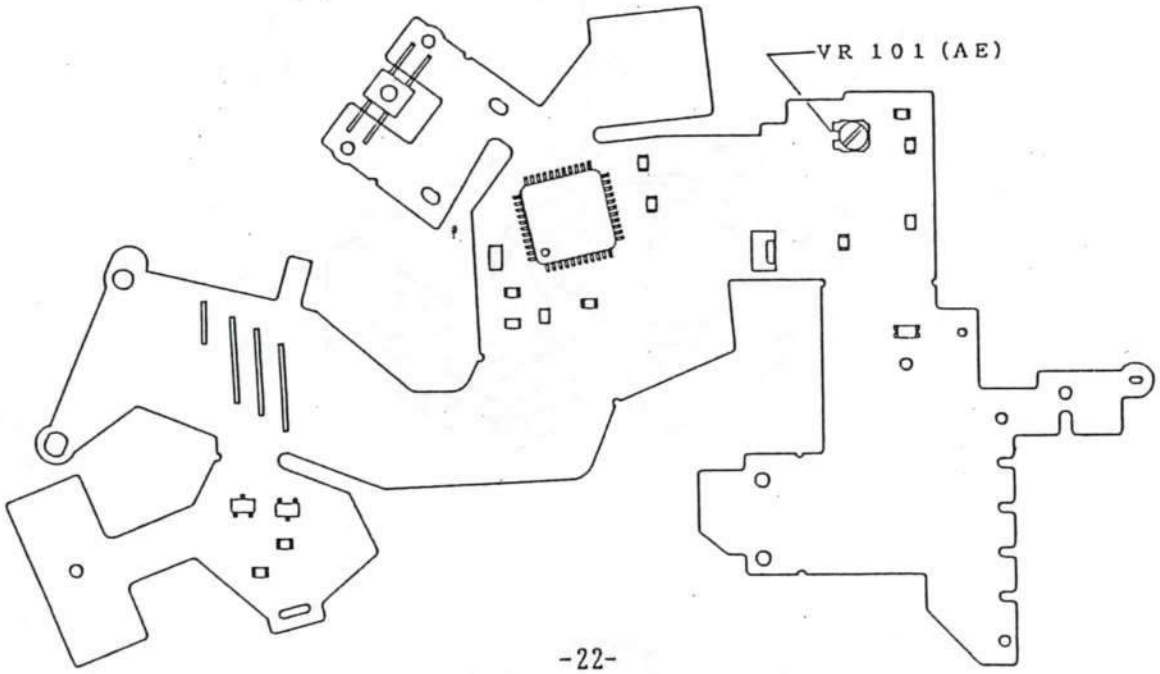
CPU PCB




LCD



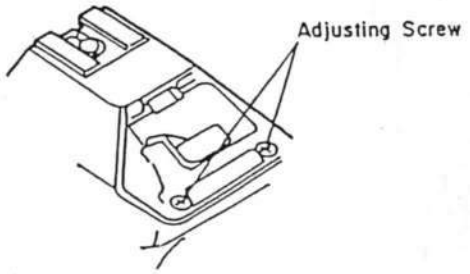

AE FPC

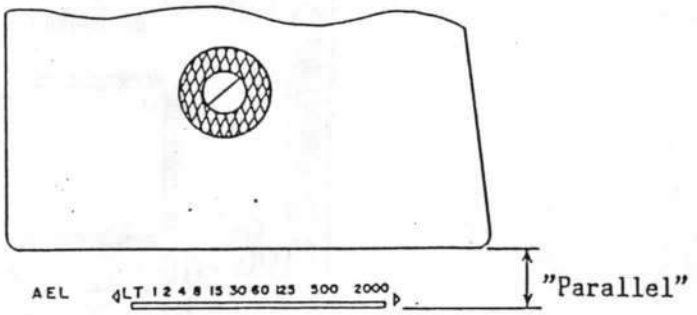


B. Mechanical adjustment

1. Positon of FLCD

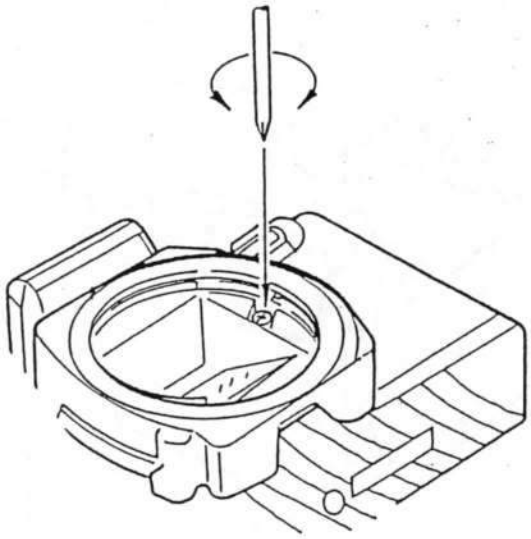
(1) Adjust with two Screws as shown in Fig.



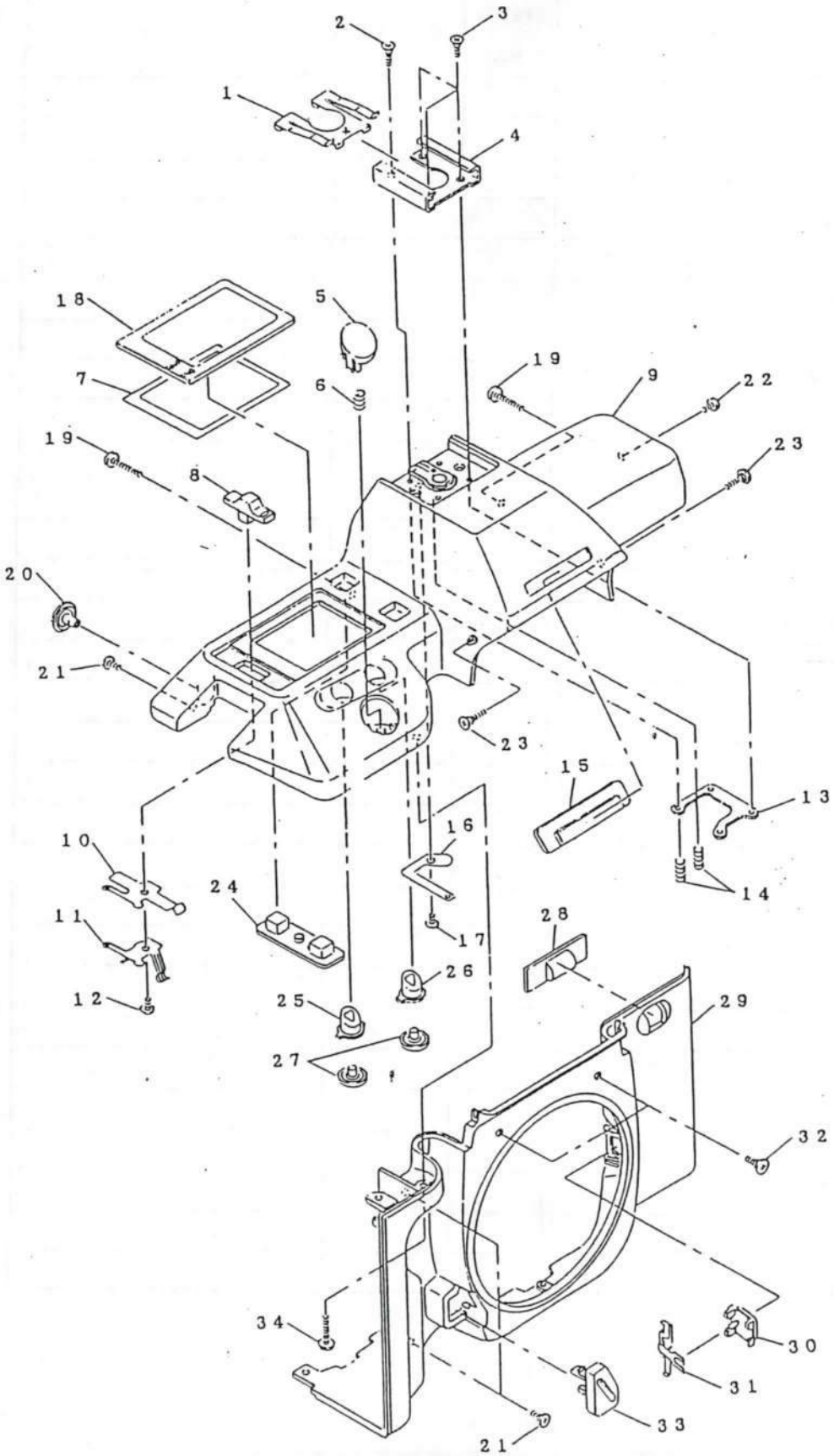




2. Finder focusing

(1) Mount the Master lens to the camera and check that the Finder focusing and if not in-focus, then adjust with Screw as shown in Fig.



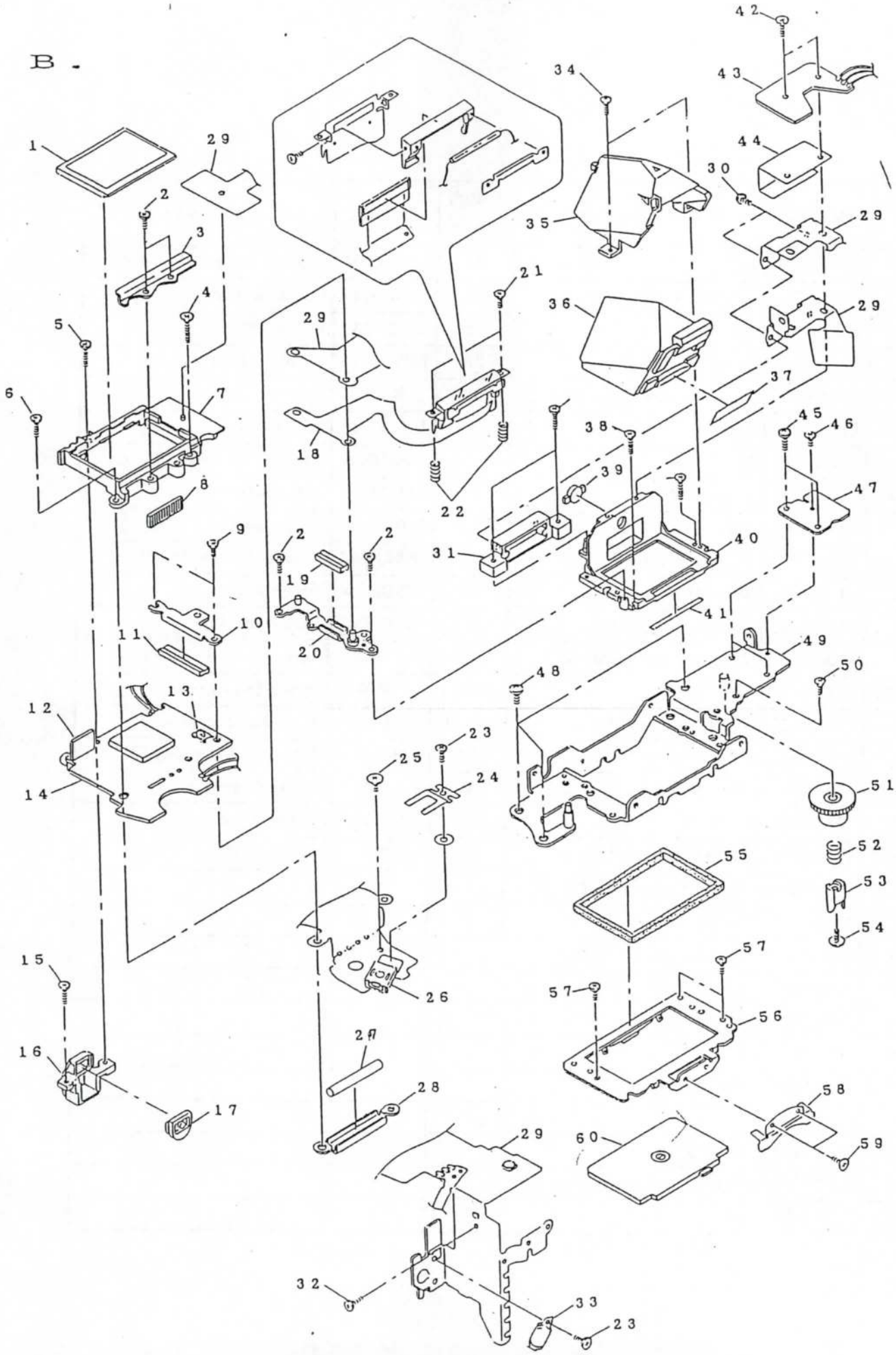
A -


2
3
1
4
18
5
7
6
19
9
22
19
8
23
20
21
23
15
13
16
10
24
14
11
17
28
26
12
25
29
27
32
34
30
31
33
21

A

| Sketch NO. | Part NO. | Description | Sketch NO. | Part NO. | Description |
|---|---|---|---|---|---|
| 1～17 | L1131067 | Top cover ass'y | | | |
| 18 | L1131550 | LCD cover | | | |
| 19 | 09851660Y | Tapping screw M1.6x6.0 | | | |
| 20 | 31375141 | Cap | | | |
| 21 | 09841630Y | Tapping screw M1.6x3.0 | | | |
| 22 | 02416025Y | Screw M1.6x2.5 | | | |
| 23 | L1021765 | Screw | | | |
| 24 | L1131530 | Self·Mode button | | | |
| 25 | L1131565 | Down button | | | |
| 26 | L1131561 | Up button | | | |
| 27 | L1061584 | T/W SW | | | |
| 28～31 | L1131066 | Front cover ass'y | | | |
| 30 | L1131536 | AEL button | | | |
| 31 | L1131539 | AEL SW spring | | | |
| 32 | L1021762 | Screw | | | |
| 33 | L1131225 | Lens lock button | | | |
| 34 | 09841660Y | Tapping screw M1.6x6.0 | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

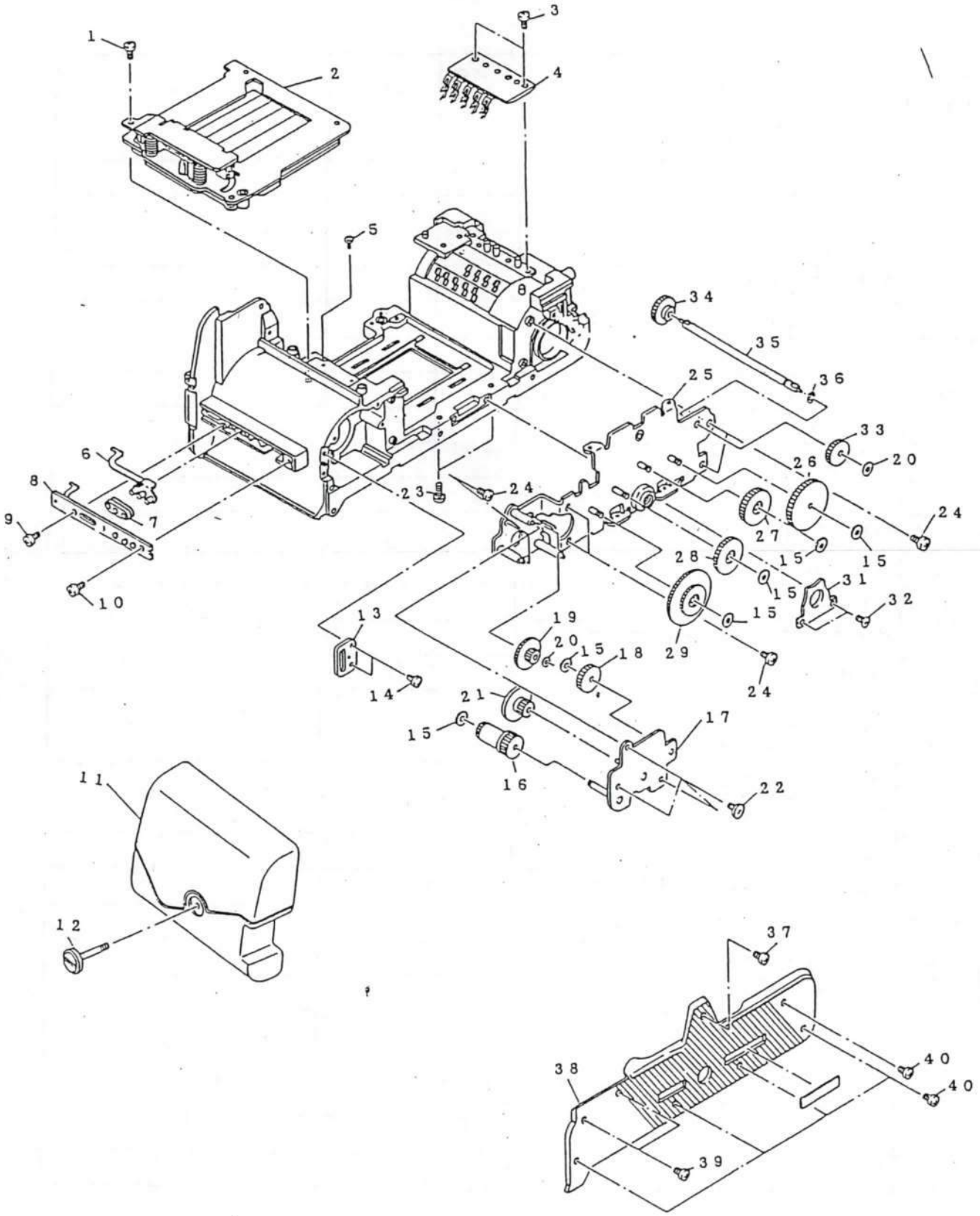
B -


1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

B

| Sketch NO. | Part NO. | Description | Sketch NO. | Part NO. | Description |
|---|---|---|---|---|---|
| 1 | L1131823 | LCD | 34 | 09841640Z | Tapping screw M1.6x4.0 |
| 2 | 09841630Z | Tapping screw M1.6x3.0 | 35 | L1131313 | Prism holder |
| 3 | L1131602 | LCD holder | 36 | L1021063 | Prism |
| 4 | 02516080Z | Screw M1.6x8.0 | 37 | L1021620 | Shield plate |
| 5 | 09841670Z | Tapping screw M1.6x7.0 | 38 | 02516040Z | Screw M1.6x4.0 |
| 6 | L1131771 | Screw | 39～41 | L1021056 | Prism frame |
| 7 | L1131601 | LCD frame | 42 | 09841640Z | Tapping screw M1.6x4.0 |
| 8 | L1131623 | LCD connector | 43 | L1131849 | SPL plate |
| 9 | 02416025Z | Screw M1.6x2.5 | 44 | L1021328 | Prism holder |
| 10～11 | L1021059 | FPC holder (upper) | 45 | 09842050Z | Tapping screw M2.0x5.0 |
| 12 | L1131829 | RW plate | 46 | 02516025W | Screw M1.6x4.0 |
| 13 | LA304154 | Variable registor (150K) | 47 | L1131108 | Strap metal A |
| 13 | LA304333 | Variable registor (33K) | 48 | 09851630Z | Tapping screw M1.6x3.0 |
| 12, 14 | L1132003 | CPU PCB U | 49～54 | L1131051 | Upper base plate |
| 15 | 09841640Z | Tapping screw M1.6x4.0 | 55～56 | L1021049 | P aadjusting plate |
| 16 | L1131571 | RW button holder | 57 | 09841635Z | Tapping screw M1.6x3.5 |
| 17 | L1131591 | RW button | 58 | L1131312 | Fresnel holder |
| 18 | L1131064 | F LCD U | 59 | 02414014W | Screw M1.4x1.4 |
| 19～20 | L1131058 | FPC holder (bottom) | 60 | L1021311 | Fresnel lens |
| 21 | 09841650Z | Tapping screw M1.6x5.0 | | | |
| 22 | L1021336 | Spring | | | |
| 23 | 09841625Z | Tapping screw M1.6x2.5 | | | |
| 24 | L1131557 | RL SW holder | | | |
| 25 | L1021761 | Screw | | | |
| 26 | L1131556 | RL SW | | | |
| 27～28 | L1131060 | FPC holder | | | |
| | | | | | |
| 29～31 | L1132009 | AE FPC U | | | |
| 32 | 09851416W | Tapping screw M1.4x1.6 | | | |
| 33 | L1021563 | AEL contact | | | |

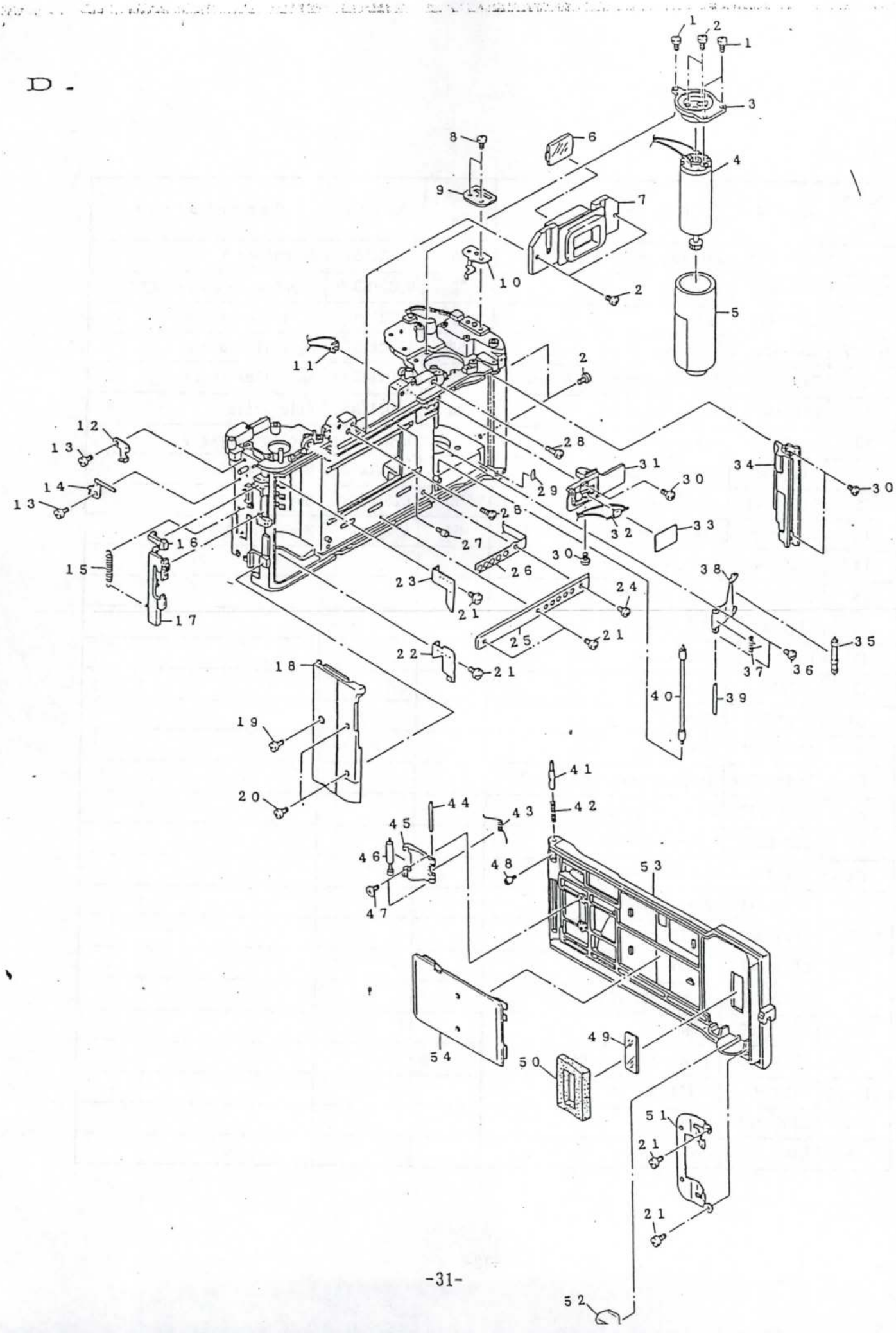
C -


1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
31
32
33
34
35
36
37
38
39
40

C

| Sketch NO. | Part NO. | Description | Sketch NO. | Part NO. | Description |
|---|---|---|---|---|---|
| 1 | 09842035Z | Tapping screw M2.0x3.5 | 40 | L1021762 | Screw |
| 2 | L1131046 | Shutter U | | | |
| 3 | 09841645Z | Tapping screw M1.6x4.5 | | | |
| 4 | L1131178 | DX contact | | | |
| 5 | 09851616Z | Tapping screw M1.6x1.6 | | | |
| 6 | L1131042 | Battery contact (+) | | | |
| 7 | L1131187 | Pin holder | | | |
| 8 | L1131041 | Battery contact (-) | | | |
| 9 | 09842035Z | Tapping screw M2.0x3.5 | | | |
| 10 | L1131770 | Screw | | | |
| 11～12 | L1131091 | Battery Box (XR-10M) | | | |
| 11～12 | L1131092 | Battery Box (KR-10M) | | | |
| 12 | L5801116 | Screw | | | |
| 13 | L1131167 | Strap metal B | | | |
| 14 | 09842050Z | Tapping screw M2.0x5.0 | | | |
| 15～18 | L1021037 | M bottom plate U | | | |
| 19 | L1131118 | M 2,3 gear | | | |
| 20 | L1131769 | Washer | | | |
| 21 | L1131120 | M 4,5 gear | | | |
| 22 | 31331694 | Screw | | | |
| 23 | 02516050W | Screw M1.6x5.0 | | | |
| 24 | 09851630Z | Tapping screw M1.6x3.0 | | | |
| 25～29 | L1131036 | Bottom base plate ass'y | | | |
| 31 | L1021107 | Plate | | | |
| 32 | 09801625Z | Tapping screw M1.6x2.5 | | | |
| 33 | L1021138 | RW 8 gear | | | |
| 34～36 | L1021040 | RW 7,8 gear shaft | | | |
| 37 | 02416060Y | Screw M1.6x6.0 | | | |
| 38 | L1131110 | Bottom cover | | | |
| 39 | L1021763 | Screw | | | |

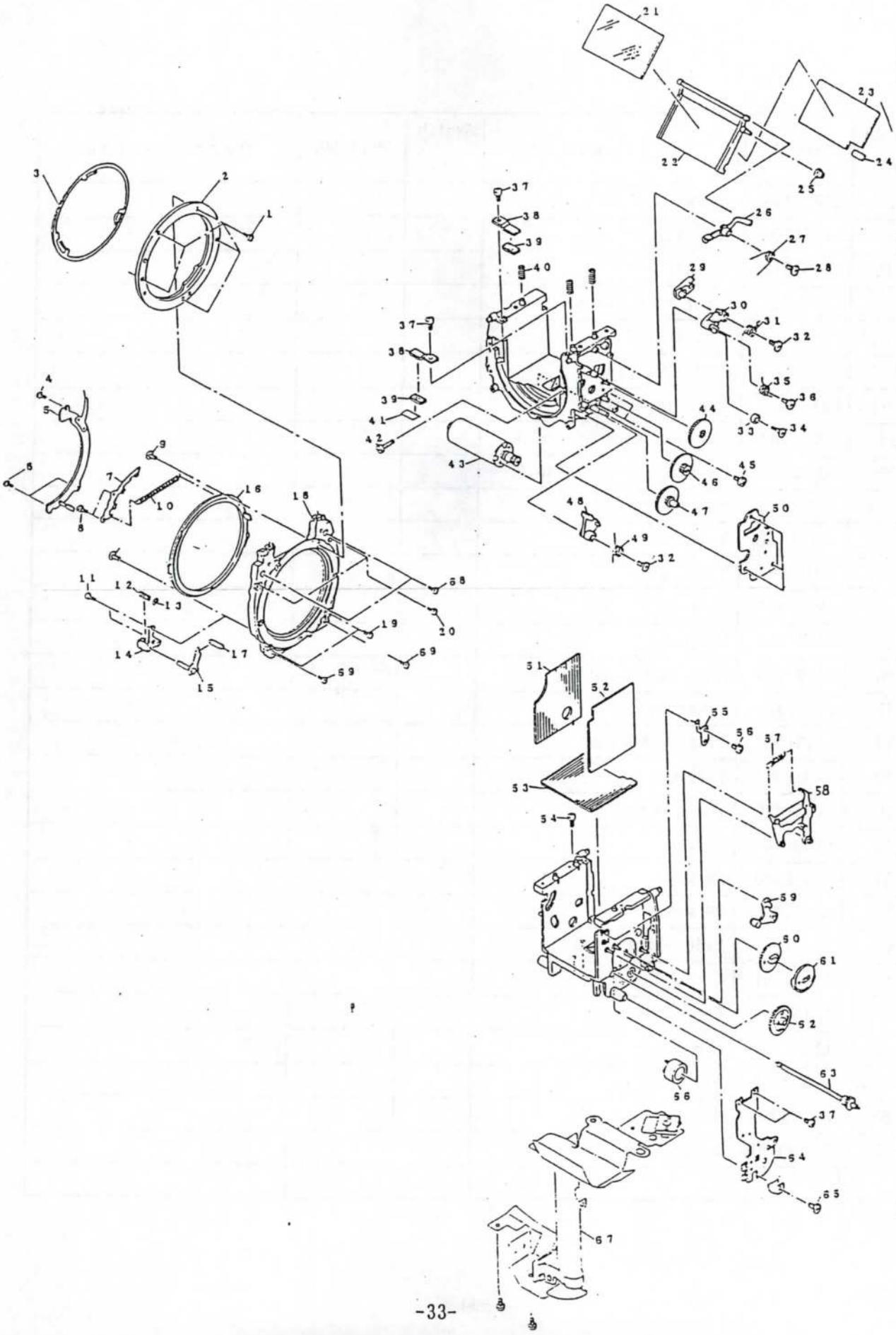
D -


1
2
1
3
8
6
4
9
7
10
2
5
11
2
12
28
13
31
34
30
14
29
30
13
28
32
33
27
16
30
26
15
38
23
24
21
17
25
21
35
22
21
37
36
18
40
39
19
41
20
44
43
42
45
46
48
53
47
54
49
50
51
21
21
52

D

| Sketch NO. | Part NO. | Description | Sketch NO. | Part NO. | Description |
|---|---|---|---|---|---|
| 1 | 09851630Z | Tapping screw M1.6x3.0 | 35 | L1021151 | AL roller A |
| 2～4 | L1131032 | W motor | 36 | 09851630W | Tapping screw M1.6x3.0 |
| 5 | L1021116 | Spool | 37 | L1021154 | AL roller spring |
| 6～7 | L1021055 | Eyepiece frame | 38 | L1021152 | AL roller plate |
| 8 | 09842050Z | Tapping screw M2.0x5.0 | 39 | L1021153 | AL roller shaft |
| 9 | L1131167 | Strap metal B | 40 | L1021155 | Film roller |
| 10 | L1021109 | Lug plate | 41～53 | L6001012 | Back cover assy |
| 11 | L1131028 | Photo-transistor | 49 | L1021268 | Film window |
| 12 | L1021248 | BPC SW A | 50 | L1021269 | Shield |
| 13 | 09851620Z | Tapping screw M1.6x2.0 | 54 | L1021072 | Pressure plate |
| 14 | L1021249 | BPG SW B | | | |
| 15 | L1021247 | Lock spring | | | |
| 16 | L1131246 | Lock button | | | |
| 17 | L6001124 | Lock claw | | | |
| 18 | L1131251 | Cover left | | | |
| 19 | L1131768 | Screw | | | |
| 20 | L1021762 | Screw | | | |
| 21 | 09841620W | Tapping screw M1.6x2.0 | | | |
| 22 | L1021149 | Patrone holder | | | |
| 23 | 31371183 | Patrone holder B | | | |
| 24 | 02420060W | Screw M2.0x6.0 | | | |
| 25 | L1021171 | Date frame | | | |
| 26 | L1132020 | DB FPC | | | |
| 27 | L1021147 | Screw | | | |
| 28 | 02516060Z | Screw M1.6x6.0 | | | |
| 29 | L1021166 | Label | | | |
| 30 | 09841640W | Tapping screw M1.6x4.0 | | | |
| 31～32 | L1131031 | W LED U | | | |
| 33 | L1021164 | Label | | | |
| 34 | L1021157 | Spool cover | | | |

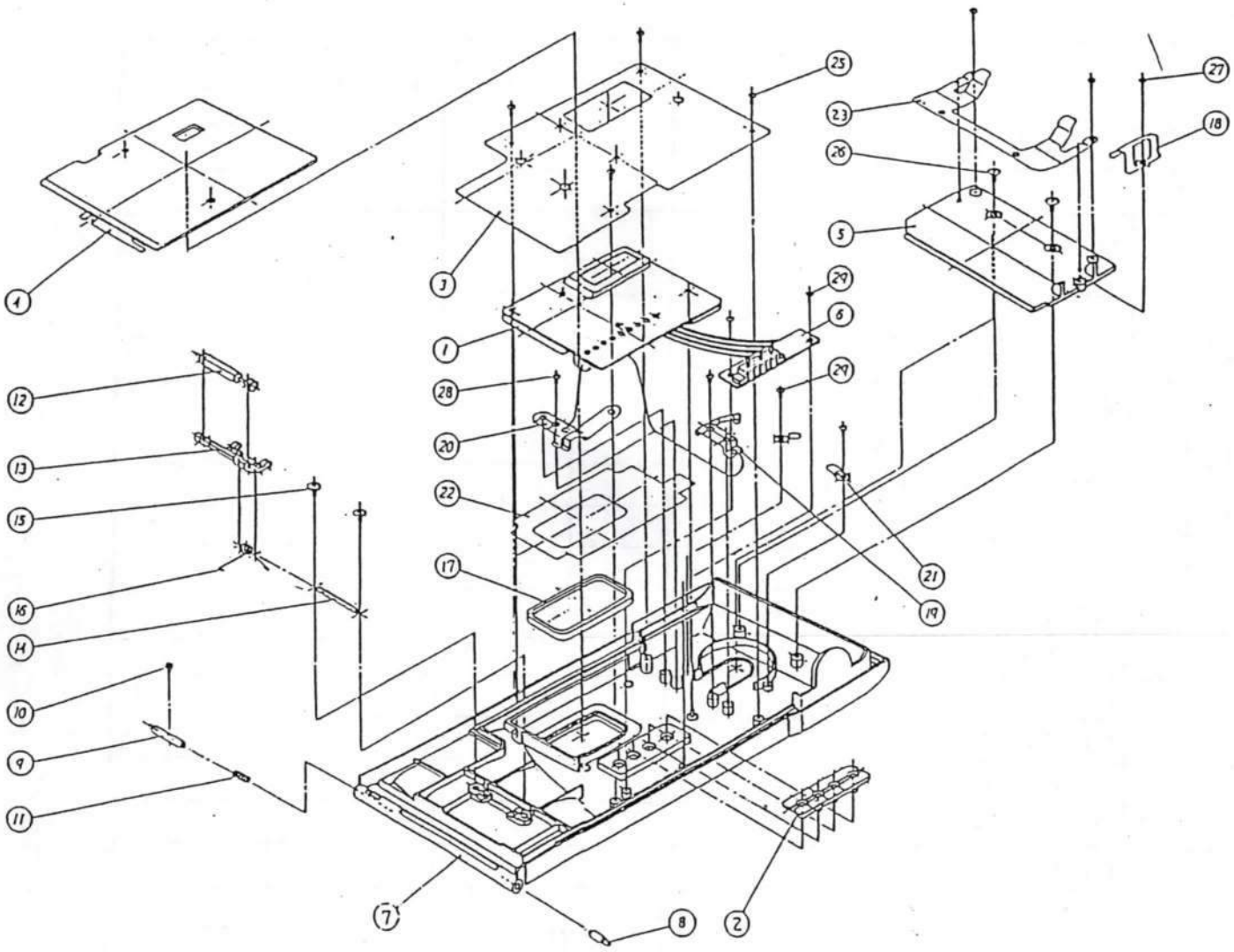
E -



E

| Sketch NO. | Part NO. | Description | Sketch NO. | Part NO. | Description |
|---|---|---|---|---|---|
| 1 | 39581236 | Screw | | | |
| 2 | L1131406 | Lens mount | | | |
| 3 | 31161672 | Spring | | | |
| 5 | L1131018 | F registor plate | | | |
| 11～15 | L1021019 | Lens lock U | | | |
| 17 | L1021228 | Lens lock pin | | | |
| 1～18 | L1131002 | Mount base assy | | | |
| 19 | 09852060W | Tapping screw M2.0x6.0 | | | |
| 20 | 09852050Z | Tapping screw M2.0x5.0 | | | |
| 21～24 | L1021013 | Mirror frame U | | | |
| 43 | L1131421 | Q motor | | | |
| 44 | L1021406 | M cam gear | | | |
| 46 | L1021404 | Q2 gear | | | |
| 47 | L1021402 | Q1 gear | | | |
| 50 | L1131415 | Side plate: left | | | |
| 57 | L1021422 | Q spring | | | |
| 58 | L1131007 | Diaphragm lever | | | |
| 59 | L1021008 | S lever | | | |
| 60 | L1021435 | Q cam gear | | | |
| 61 | L1021449 | Q cam | | | |
| 62 | L1021009 | SW gear | | | |
| 63 | L1021006 | Q3 gear | | | |
| 64 | L1131011 | Side plate: right | | | |
| 65 | L1021761 | Screw | | | |
| 1～65 | L1131001 | Mirror box ass'y | | | |
| 66 | LB401363 | Capacitor | | | |
| 66～67 | L1132002 | DV FPC U | | | |
| 68 | 02520050Z | Screw M2.0x5.0 | | | |
| 69 | 02520060Z | Screw M2.0x6.0 | | | |
| | | | | | |

F -



F

| Sketch NO. | Part NO. | Description | Sketch NO. | Part NO. | Description |
|---|---|---|---|---|---|
| 1 | L5911000 | Module | | | |
| 2 | L5911127 | SW | | | |
| 3 | L5911020 | Holder | | | |
| 4 | L5911030 | Pressure plate | | | |
| 5 | L5911143 | Battery cover | | | |
| 6 | L5911060 | Base plate assy | | | |
| 7～17 | L5951010 | Back cover assy | | | |
| 18 | L1021277 | Patrone holder B | | | |
| 19 | L5911144 | Battery contact (+) | | | |
| 20 | L5911145 | Battery contact (-) | | | |
| 21 | L5911151 | Battery holder | | | |
| 22 | L5911125 | Shield plate assy | | | |
| 23 | L1021276 | Patrone holder A | | | |
| 25 | L5911146 | Screw A | | | |
| 26 | L5911147 | Screw C | | | |
| 27 | L5911148 | Screw D | | | |
| 28 | L5911149 | Screw E | | | |
| 29 | L5911150 | Screw F | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

## 9. PARTS INDEX

| | Part NO. | Description | Sketch NO. |
|---|---|---|---|
| ★ | L1131001 | Mirror box assy | E-1~65 |
| | L1131002 | Mount base assy | E-1~18 |
| | L1131007 | Diaphragm lever | E-58 |
| | L1131011 | Side plate: right | E-64 |
| ★ | L1131018 | F registor plate | E-5 |
| ★ | L1131028 | Photo-transistor | D-11 |
| ★ | L1131031 | W LED U | D-31~32 |
| | L1131032 | W motor | D-2~4 |
| | L1131036 | Bottom base plate assy | C-25~30 |
| | L1131041 | Battery contact(-) | C-8 |
| | L1131042 | Battery contact(+) | C-6 |
| ★ | L1131046 | Shutter U | C-2 |
| | L1131051 | Upper base plate | B-49~54 |
| | L1131058 | FPC holder (bottom) | B-19~20 |
| | L1131060 | FPC holder | B-27~28 |
| | L1131064 | F LCD U | B-18 |
| | L1131066 | Front cover assy | A-28~31 |
| | L1131067 | Top cover assy | A-1~17 |
| | L1131091 | Battery box (XR-10M) | C-11~12 |
| | L1131092 | Battery box (KR-10M) | C-11~12 |
| | L1131108 | Strap metal A | B-47 |
| | L1131110 | Bottom cover | C-38 |
| | L1131118 | M2,3 gear | C-19 |
| | L1131120 | M4,5 gear | C-21 |
| | L1131167 | Strap metal B | C-13,D-9 |
| | L1131178 | DX contact | C-4 |
| | L1131187 | Pin holder | C-7 |
| | L1131225 | Lens lock button | A-33 |
| | L1131246 | Lock button | D-16 |
| | L1131251 | Cover left | D-18 |
| | L1131312 | Fresnel holder | B-58 |

| Part NO. | Description | Sketch NO. |
|---|---|---|
| L1131313 | Prism holder | B-35 |
| L1131406 | Lens mount | E-2 |
| L1131415 | Side plate: left | E-50 |
| L1131421 | Q motor | E-43 |
| L1131530 | Self·Mode button | A-24 |
| L1131536 | AEL button | A-30 |
| L1131539 | AEL SW spring | A-31 |
| L1131550 | LCD cover | A-18 |
| L1131556 | RL SW | B-26 |
| L1131557 | RL SW holder | B-24 |
| L1131561 | Up button | A-26 |
| L1131565 | Down button | A-25 |
| L1131571 | RW button holder | B-16 |
| L1131591 | RW button | B-17 |
| L1131601 | LCD frame | B-7 |
| L1131602 | LCD holder | B-3 |
| L1131623 | LCD connector | B-8 |
| L1131768 | Screw | D-19 |
| L1131769 | Washer | C-20 |
| L1131770 | Screw | C-10 |
| L1131771 | Screw | B-6L |
| L1131823 | LCD | B-1L1 |
| L1131829 | RW plate | B-12L1 |
| L1131849 | SPL plate | B-43 |
| ★ L1132002 | DV FPC U | E-66~67 |
| ★ L1132003 | CPU PCB U | B-12~14 |
| ★ L1132009 | AE FPC U | B-29~31 |
| ★ L1132020 | DB FPC | D-26 |
| | | |
| | | |
| | | |

| Part NO. | Description | Sketch NO. |
|---|---|---|
| L1021006 | Q3 gear | E-63 |
| L1021008 | S lever | E-59 |
| L1021009 | SW gear | E-62 |
| L1021013 | Mirror frame U | E-21~24 |
| L1021019 | Lens lock U | E-11~15 |
| L1021037 | M bottom plate U | C-15~18 |
| L1021040 | RW 7,8gear shaft | C-34~36 |
| L1021049 | P adjusting plate | B-55~56 |
| L1021055 | Eyepiece frame | D-6~7 |
| L1021056 | Prism frame | B-39~41 |
| L1021059 | FPC holder(upper) | B-10~11 |
| L1021063 | Prism | B-26 |
| L1021072 | Pressure plate | D-53 |
| L1021107 | Plate | C-31 |
| L1021109 | Lug plate | D-10 |
| L1021116 | Spool | D-5 |
| L1021138 | RW 8 gear | C-33 |
| L1021147 | Screw | D-27 |
| L1021149 | Patrone holder | D-22 |
| L1021151 | AL roller A | D-35 |
| L1021152 | AL roller plate | D-38 |
| L1021153 | AL roller shaft | D-39 |
| L1021154 | AL roller spring | D-37 |
| L1021155 | Film roller | D-40 |
| L1021157 | Spool cover | D-34 |
| L1021164 | Label | D-33 |
| L1021166 | Label | D-29 |
| L1021171 | Date frame | D-25 |
| L1021228 | Lens lock pin | E-17 |
| L1021247 | Lock spring | D-15 |
| L1021248 | BPC SW A | D-12 |
| L1021249 | BPC SW B | D-14 |

| Part NO. | Description | Sketch NO. |
|---|---|---|
| L1021268 | Film window | D-49 |
| L1021269 | Shield | D-50 |
| L1021276 | Patrone holder A | F-23 |
| L1021277 | Patrone holder B | F-18 |
| L1021311 | Fresnel lens | B-60 |
| L1021328 | Shield plate | B-44 |
| L1021336 | Spring | B-22 |
| L1021402 | Q 1 gear | E-47 |
| L1021404 | Q 2 gear | E-46 |
| L1021406 | M cam gear | E-44 |
| L1021422 | Q spring | E-57 |
| L1021435 | Q cam gear | E-60 |
| L1021449 | Q cam | E-61 |
| L1021563 | AEL contact | B-33 |
| L1021620 | Shield plate | B-37 |
| L1021761 | Screw | B-25,E-65 |
| L1021762 | Screw | A-32,D-20 |
| | | C-40 |
| L1021763 | Screw | C-39 |
| L1021765 | Screw | A-23 |
| L1061584 | T/W SW | A-27 |
| | | |
| L5801116 | Screw | C-12 |
| | | |
| L6001012 | Back cover assy | D-41~52 |
| L6001124 | Lock claw | D-17 |
| | | |
| 31161672 | Spring | E-3 |
| | | |
| 31331694 | Screw | C-22 |
| | | |
| 31371183 | Patrone holder B | D-23 |

| Part NO. | Description | Sketch NO. |
|---|---|---|
| 31375141 | Cap | A-20 |
| | | |
| 39581236 | Screw | E-1 |
| | | |
| LA304154 | Variable registor(150K) | B-13 |
| LA304333 | Variable registor( 33K) | B-13 |
| | | |
| LB401363 | Capacitor | E-66 |
| | | |
| 02414014W | Screw M1.4x1.4 | B-59 |
| 02416025Y | Screw M1.6x2.5 | A-22 |
| 02416025Z | Screw M1.6x2.5 | B-9 |
| 02416060Y | Screw M1.6x6.0 | C-37 |
| 02420060W | Screw M2.0x6.0 | D-24 |
| 02516025W | Screw M1.6x2.5 | B-46 |
| 02516040Z | Screw M1.6x4.0 | B-38 |
| 02516050W | Screw M1.6x5.0 | C-23 |
| 02516060Z | Screw M1.6x6.0 | D-28 |
| 02516080Z | Screw M1.6x8.0 | B-4 |
| 02520050Z | Screw M2.0x5.0 | E-68 |
| 02520060Z | Screw M2.0x6.0 | E-69 |
| 09801625Z | Tapping screw M1.6x2.5 | C-32 |
| 09841620W | Tapping screw M1.6x2.0 | D-21 |
| 09841625Z | Tapping screw M1.6x2.5 | B-23 |
| 09841630Y | Tapping screw M1.6x3.0 | A-21 |
| 09841630Z | Tapping screw M1.6x3.0 | B-2 |
| 09841635Z | Tapping screw M1.6x3.5 | B-57 |
| 09841640W | Tapping screw M1.6x4.0 | C-30 |
| 09841640Z | Tapping screw M1.6x4.0 | B-15,34, |
| | | 42,D-3 |
| 09841645Z | Tapping screw M1.6x4.5 | C-3 |
| 09841650Z | Tapping screw M1.6x5.0 | B-21 |

| Part NO. | Description | Sketch NO. |
|---|---|---|
| 09841660Y | Tapping screw M1.6x6.0 | A-34 |
| 09841670Z | Tapping screw M1.6x7.0 | B-5 |
| 09842035Z | Tapping screw M2.0x3.5 | C-1,9 |
| 09842050Z | Tapping screw M2.0x5.0 | B-45,C-14 |
| 09851416W | Tapping screw M1.4x1.6 | B-32 |
| 09851616Z | Tapping screw M1.6x1.6 | C-5 |
| 09851620Z | Tapping screw M1.6x2.0 | D-13 |
| 09851630W | Tapping screw M1.6x3.0 | D-36 |
| 09851630Z | Tapping screw M1.6x3.0 | B-48,D-1 |
| | | C-24 |
| 09851660Y | Tapping screw M1.6x6.0 | A-19 |
| 09852050Z | Tapping screw M2.0x5.0 | D-8,E-20 |
| 09852060W | Tapping screw M2.0x6.0 | E-19 |
| | | |
| L5911000 | Module | F-1 |
| L5911020 | Holder | F-3 |
| L5911030 | Pressure plate | F-4 |
| L5911060 | Base plate assy | F-6 |
| L5911125 | Shield plate sssy | F-22 |
| L5911127 | SW | F-2 |
| L5911143 | Battery cover | F-5 |
| L5911144 | Battery contact(+) | F-19 |
| L5911145 | Battery contact(-) | F-20 |
| L5911146 | Screw A | F-25 |
| L5911147 | Screw C | F-26 |
| L5911148 | Screw D | F-27 |
| L5911149 | Screw E | F-28 |
| L5911150 | Screw F | F-29 |
| L5911151 | Battery holder | F-21 |
| L5951010 | Back cover assy | F-7~17 |
| | | |
| | | |

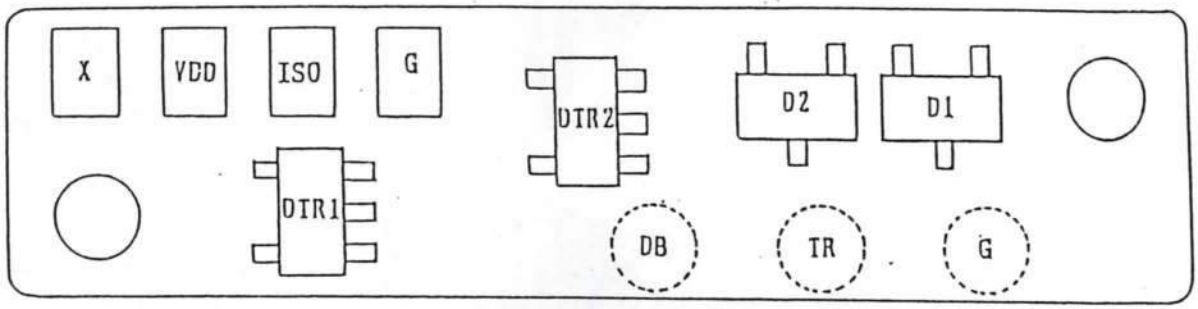
Note:

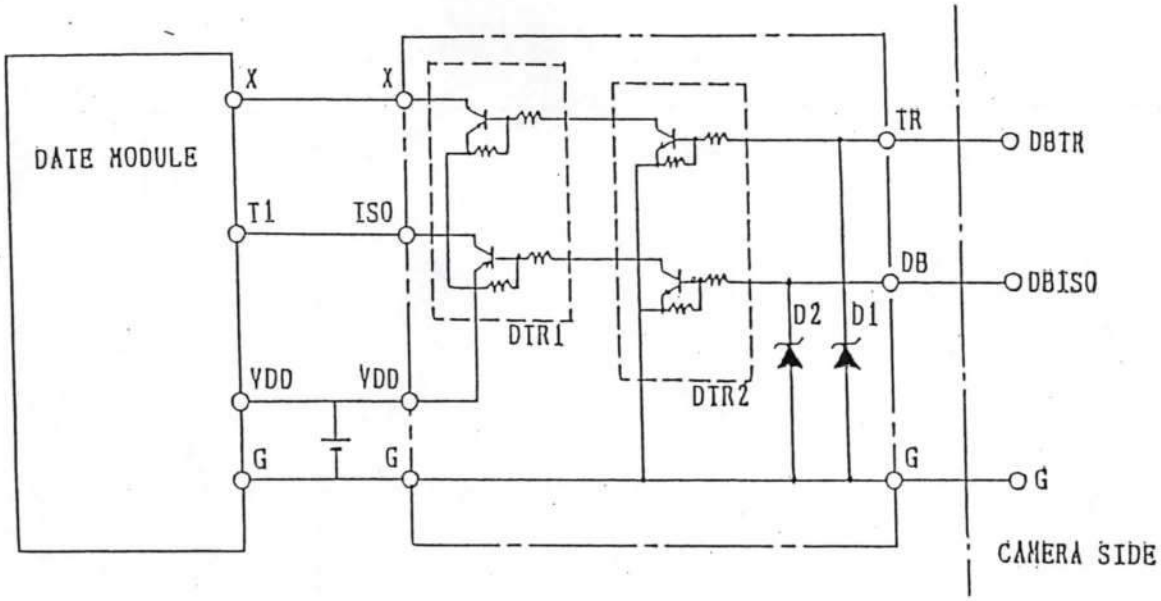
The item marked with "★" is a strategic product and is subject to the cocom regulations.

Reexport of such an item reguires strict compliance with the export regulations of exporting countries.

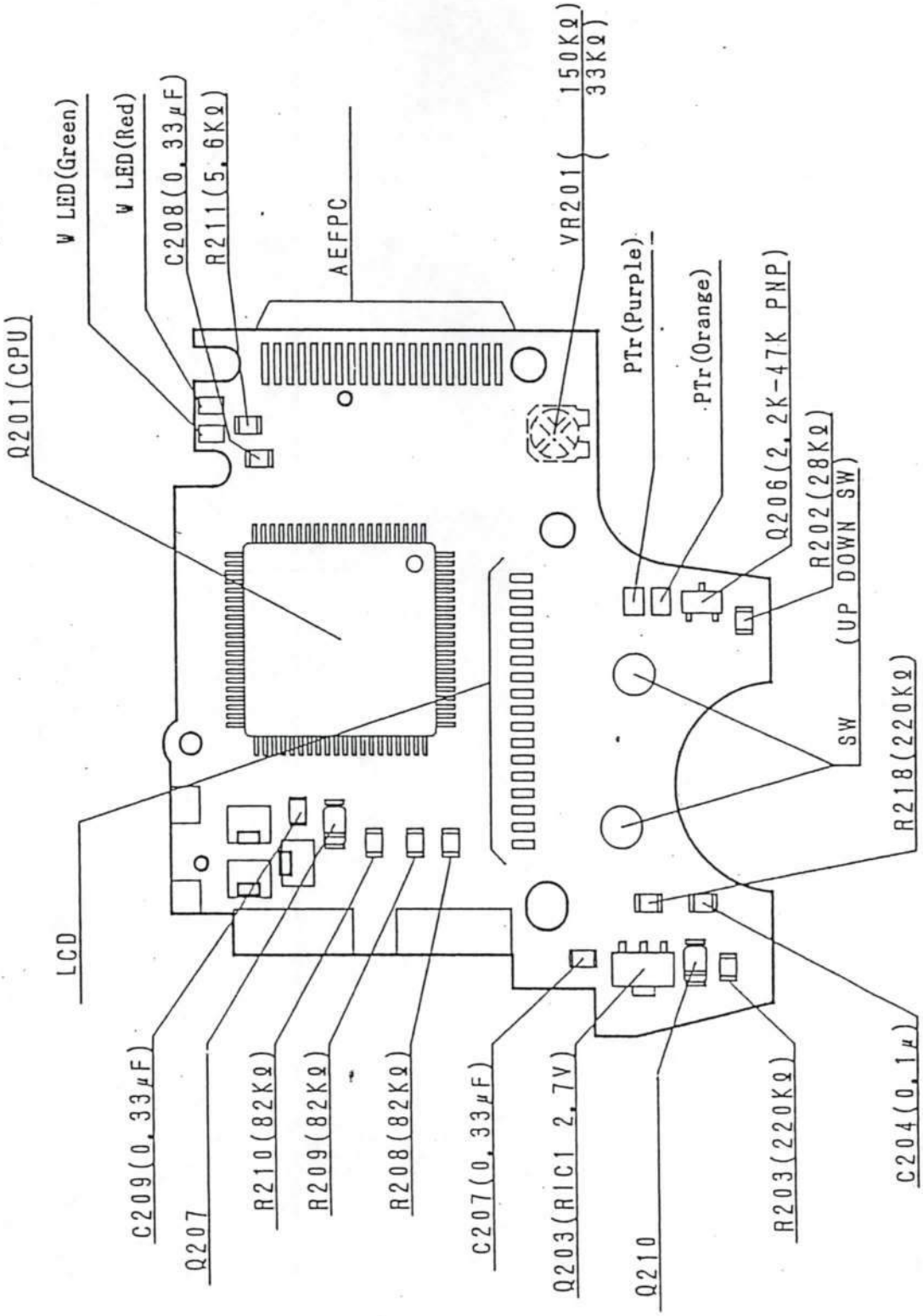
Our acceptance of order is subject to the Japanese Government approval in export.

# 10. DATA BACK/SCHEMATIC DIAGRAM

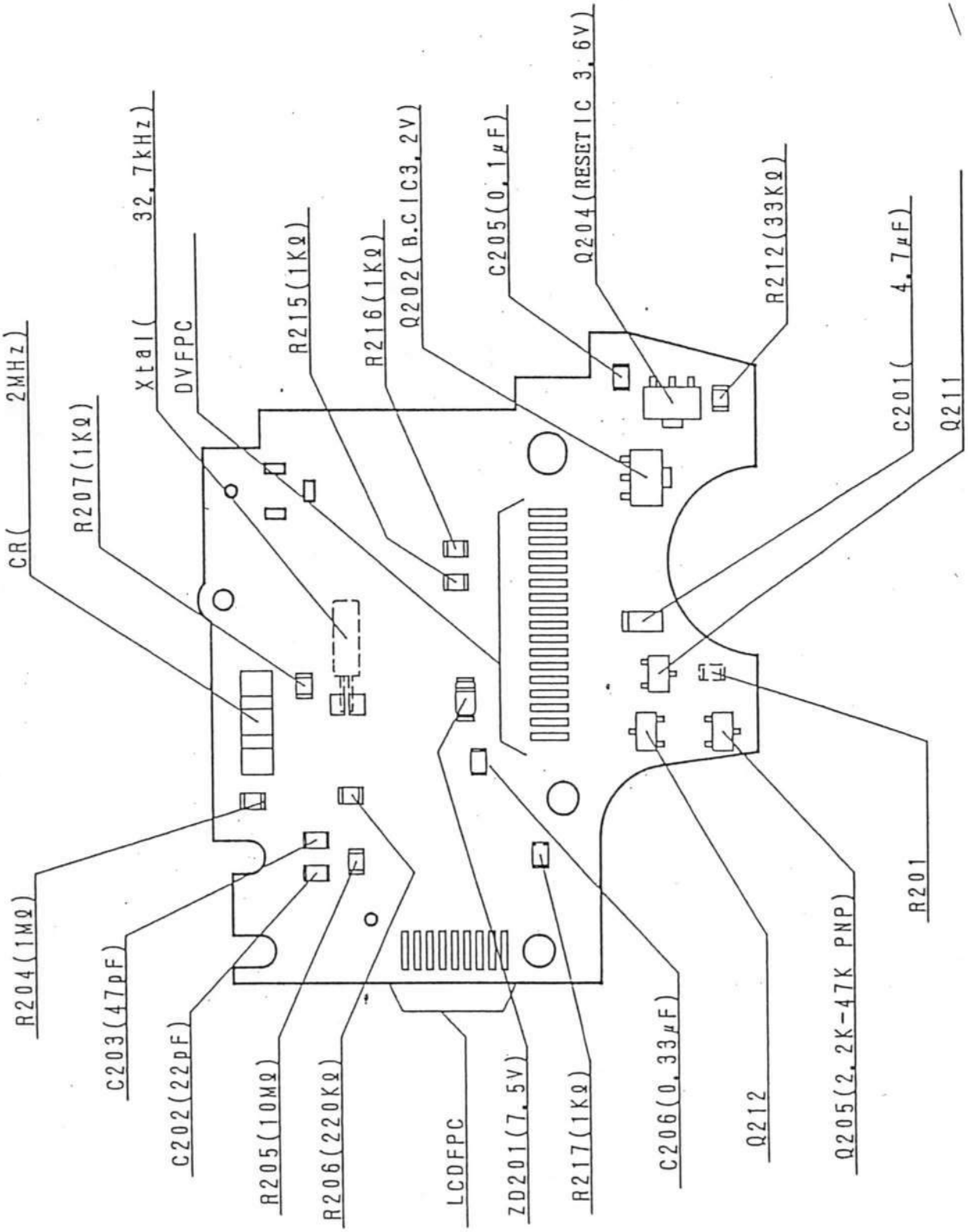


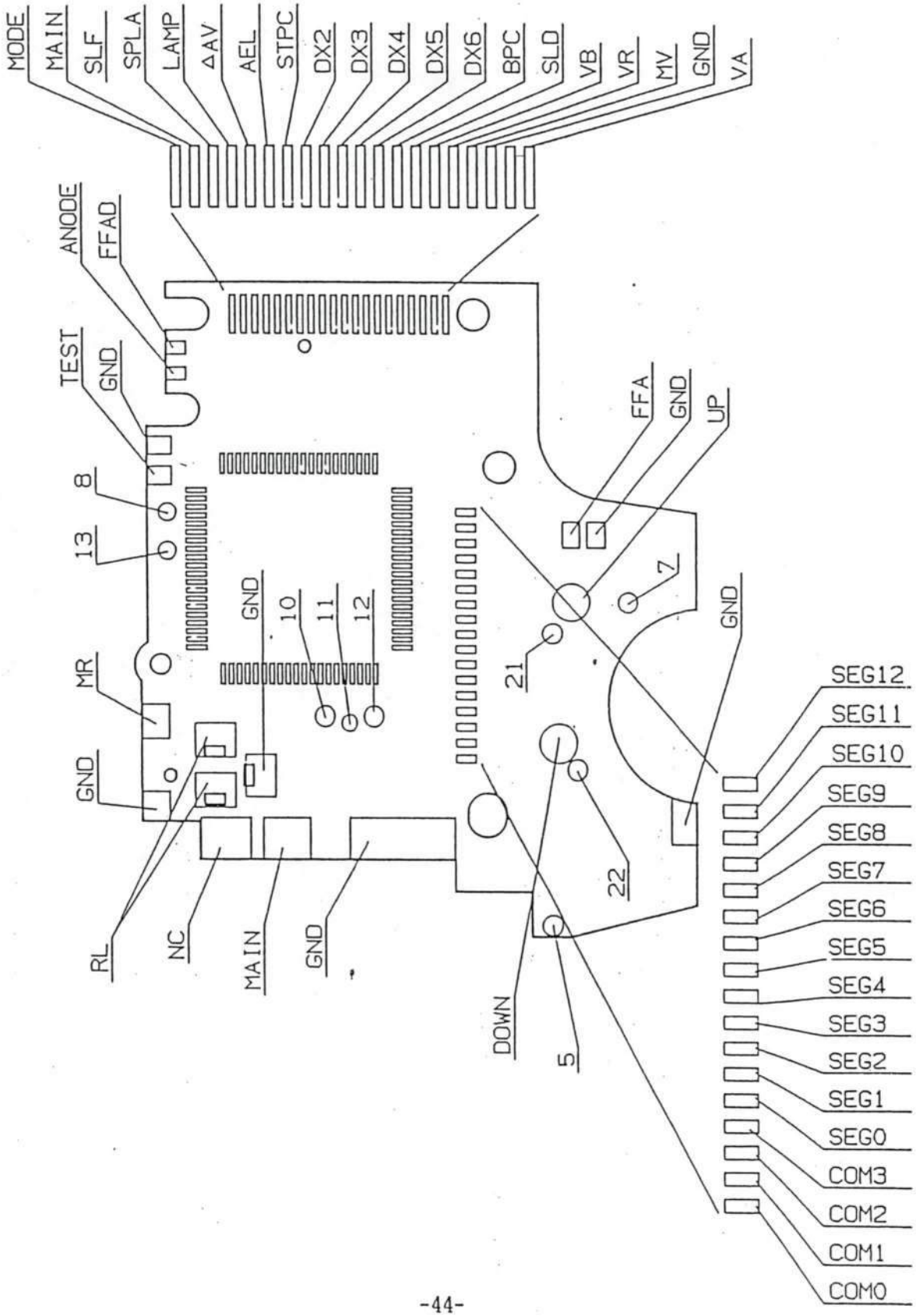
# 11-1.CPU PCB/PARTS ARRANGEMENT (Top view)



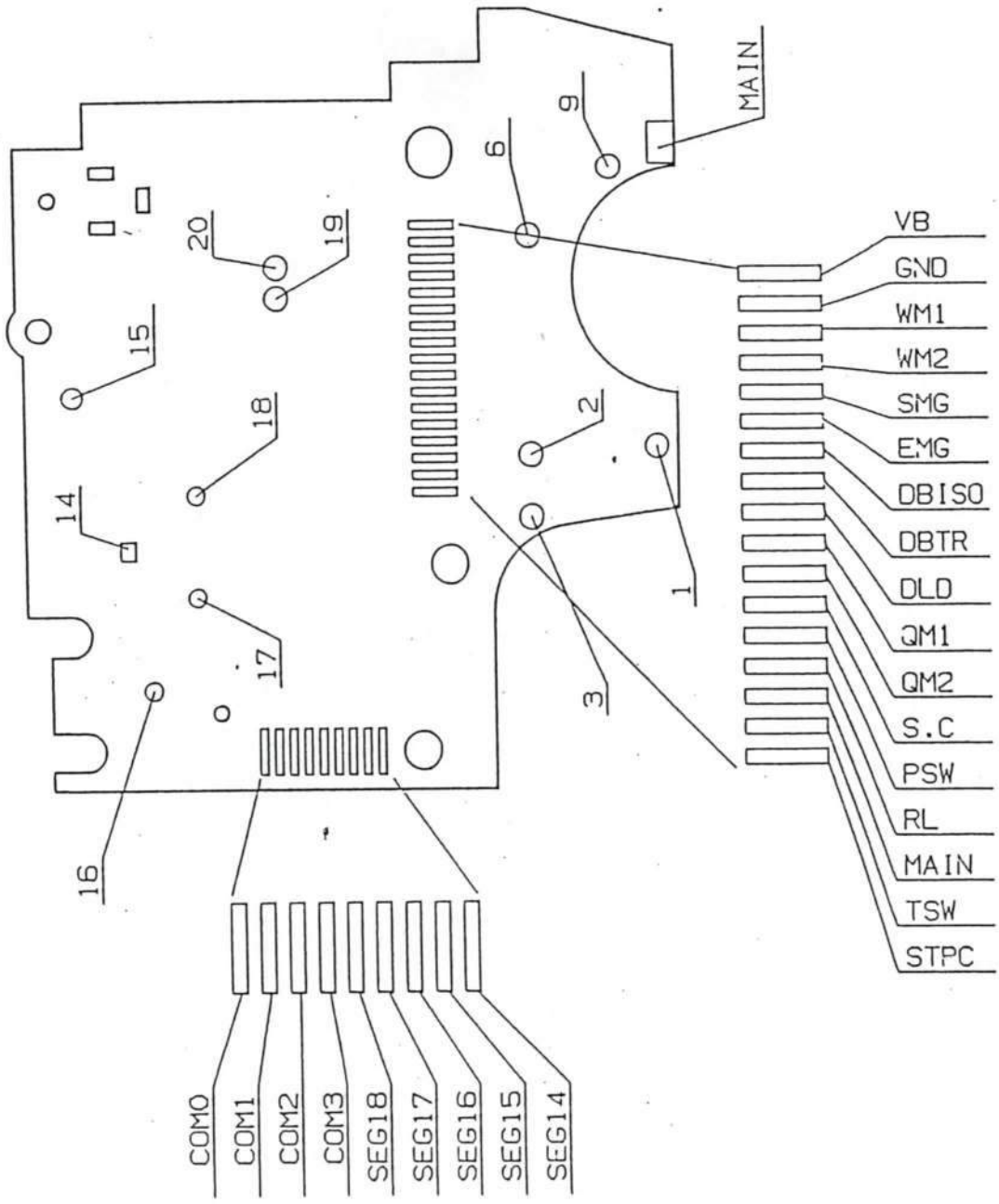
11-2.CPU PCB/PARTS ARRANGEMENT (Bottom view)



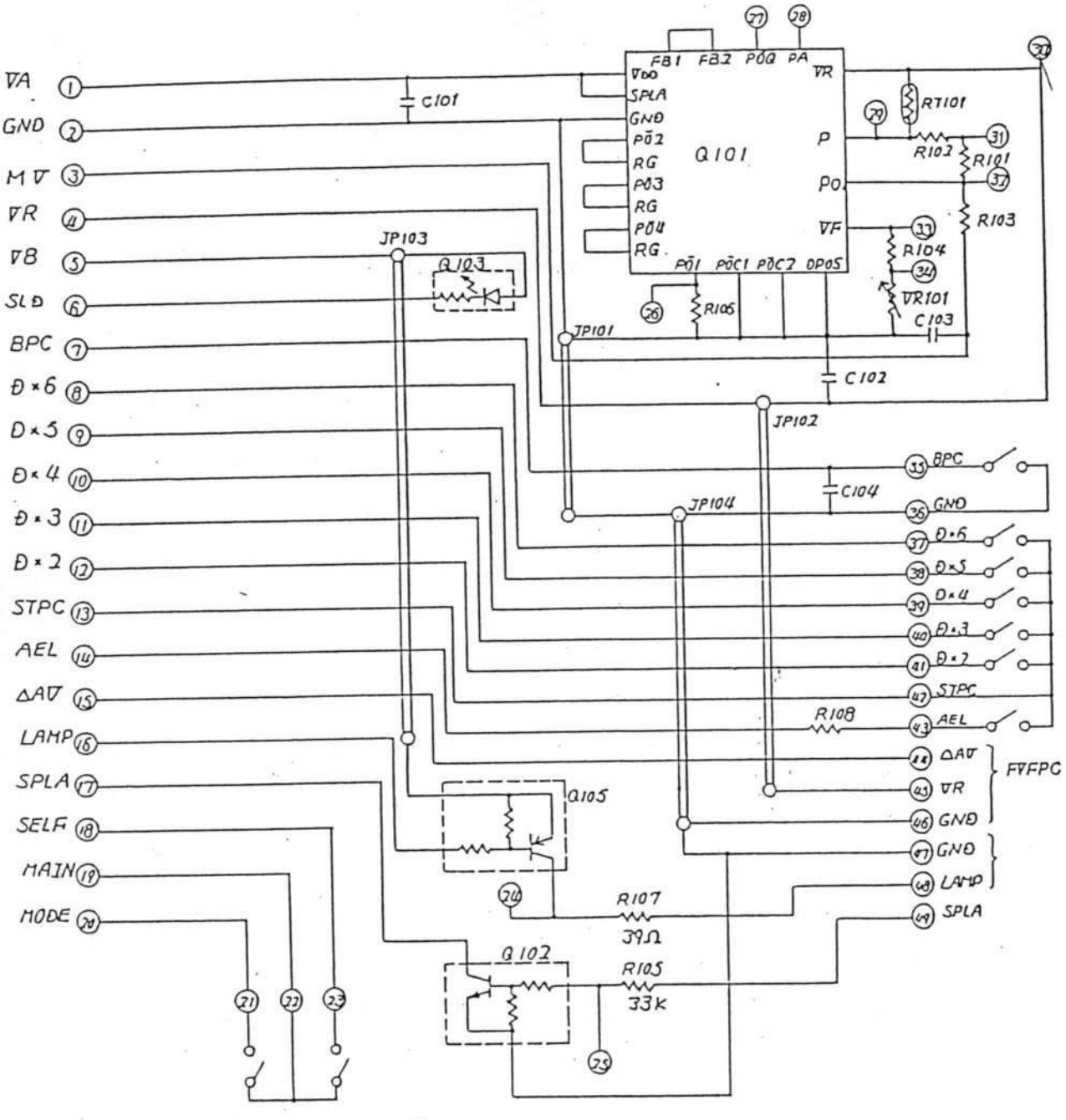
## 11-3. CPU PCB/TERMINAL NAME (Top view)



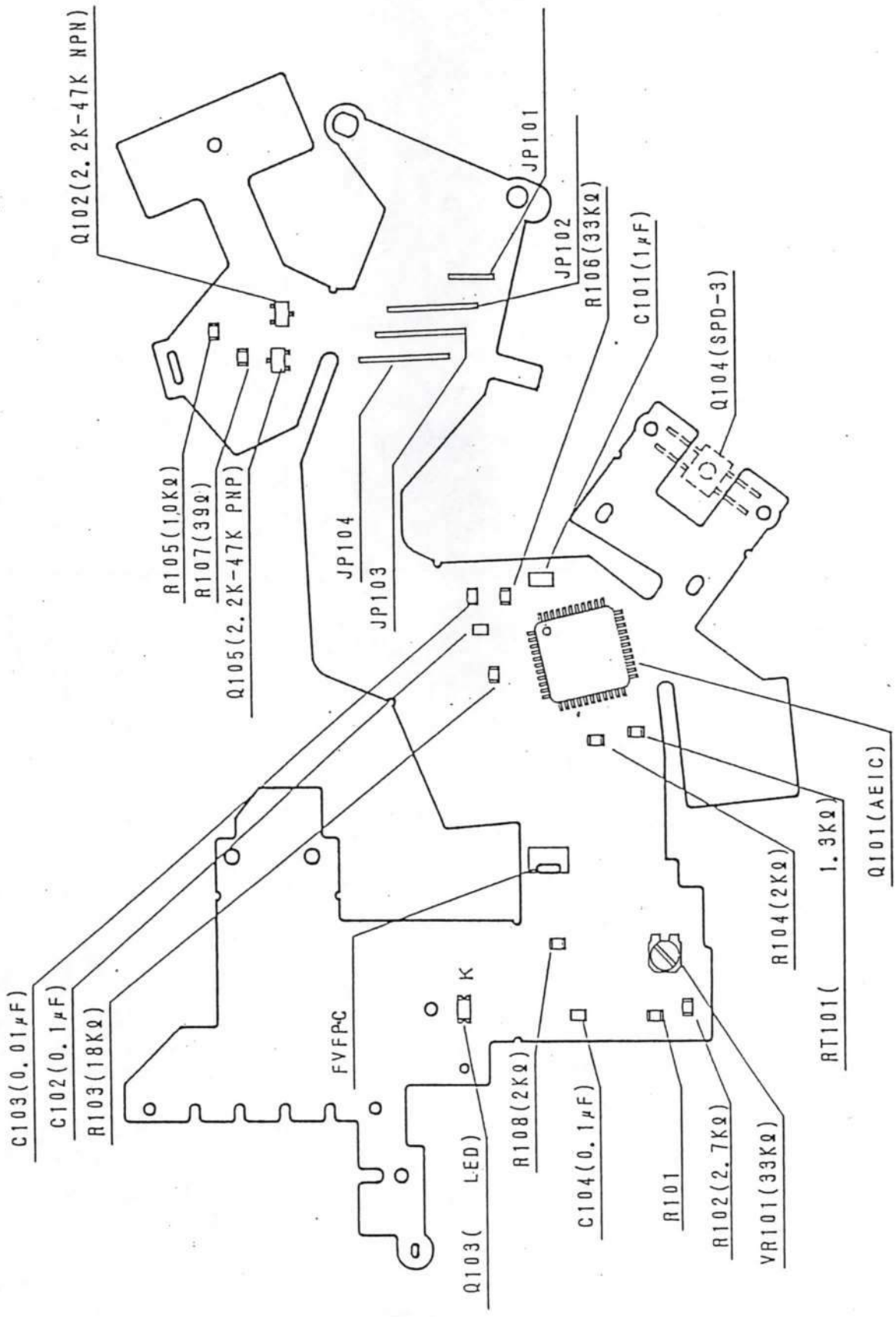
11-4. CPU PCB/TERMINAL NAME (Bottom view)



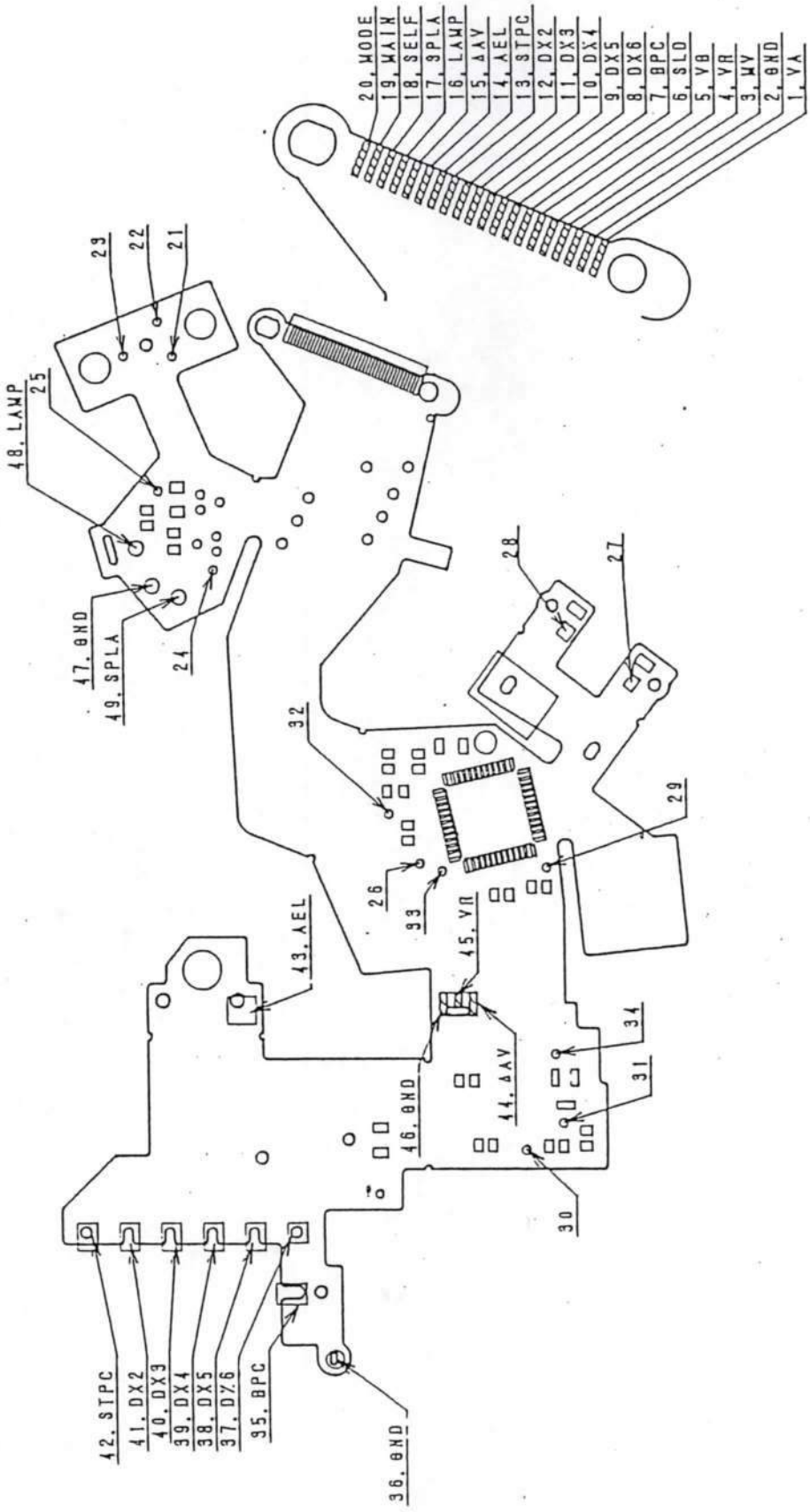
# 11-5. AE FPC/SCHEMATIC DIAGRAM



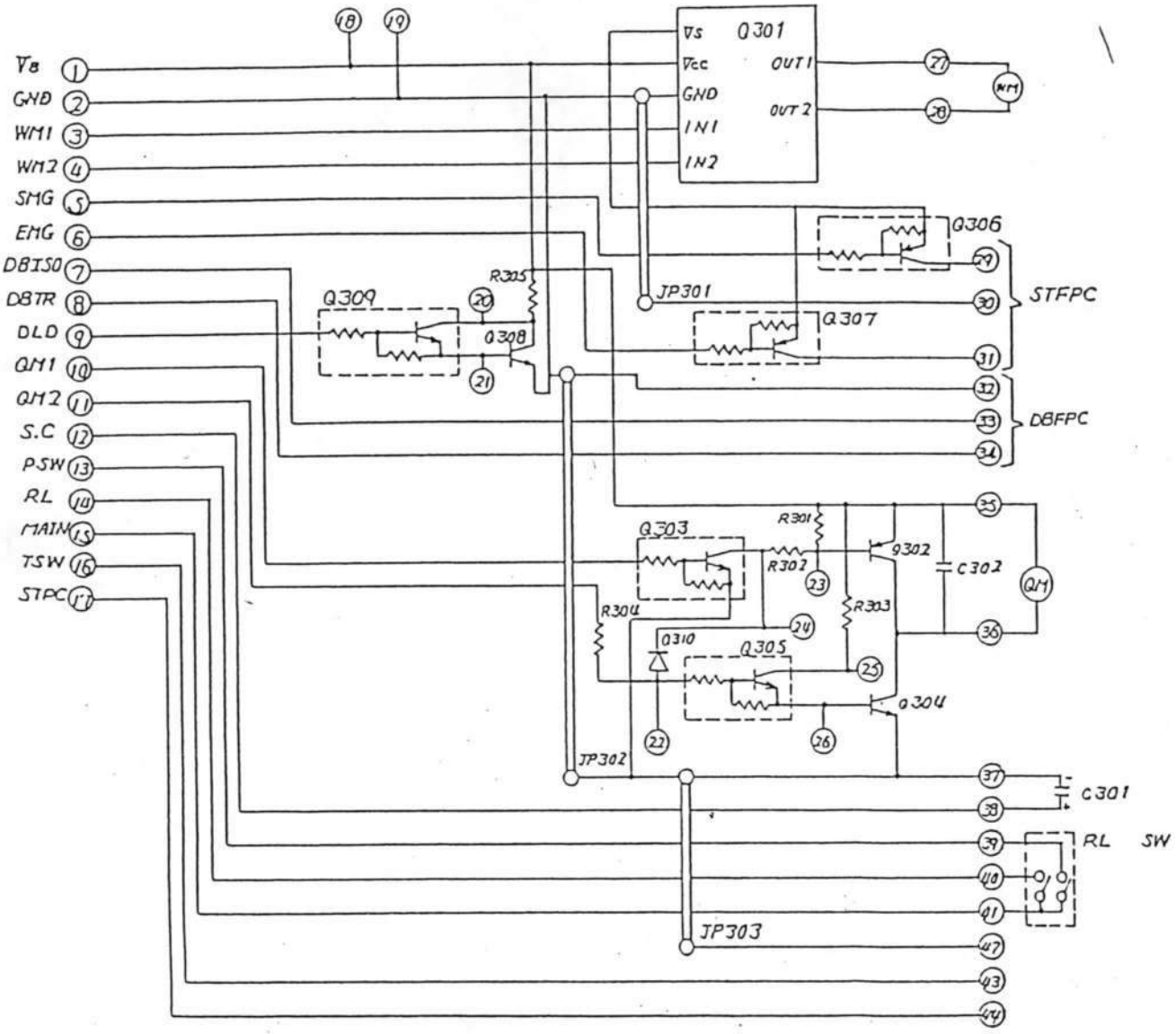
# 11-6. AE FPC/PARTS ARRANGEMENT



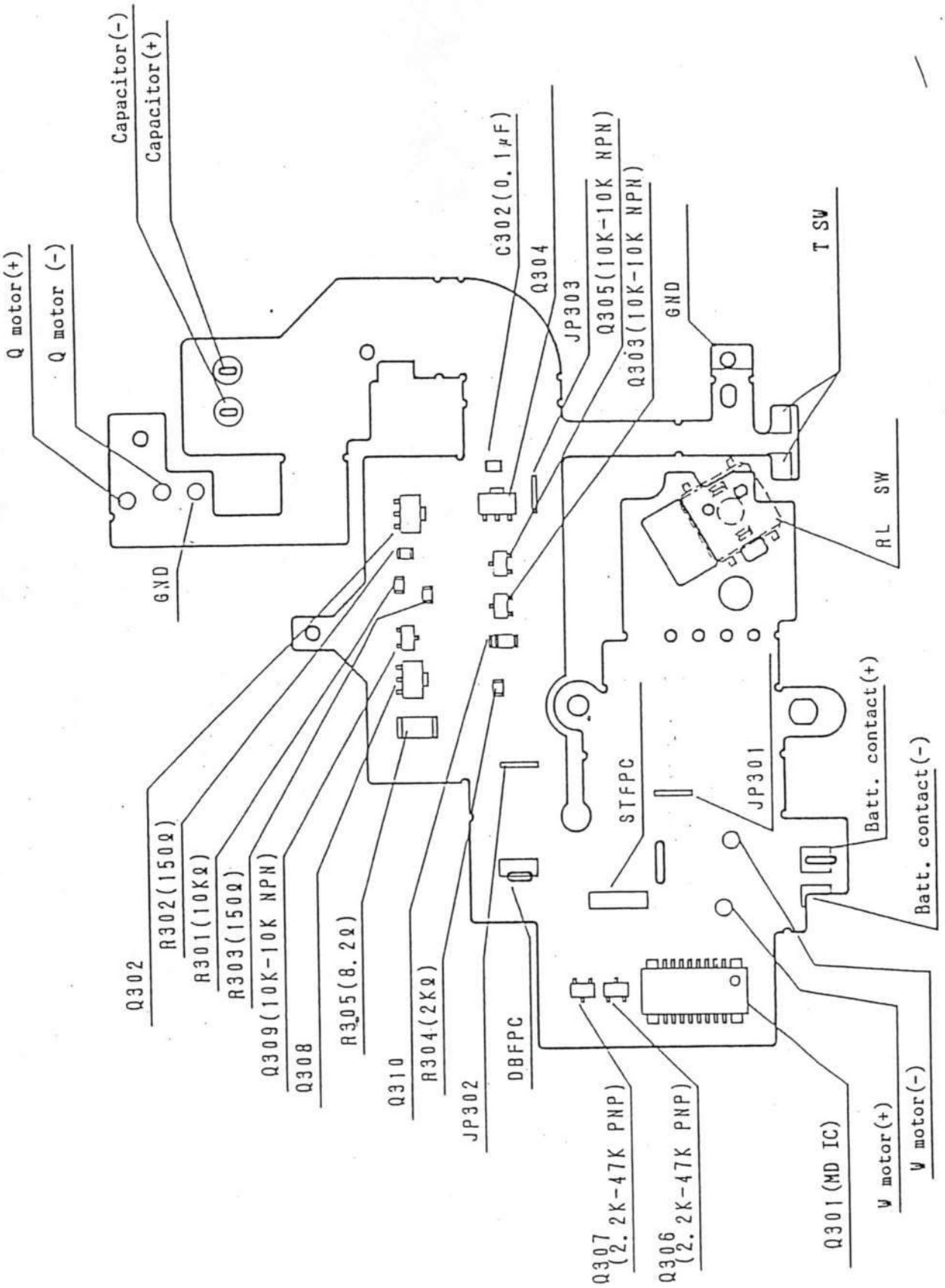
# 11-7. AE FPC/TERMINAL NAME



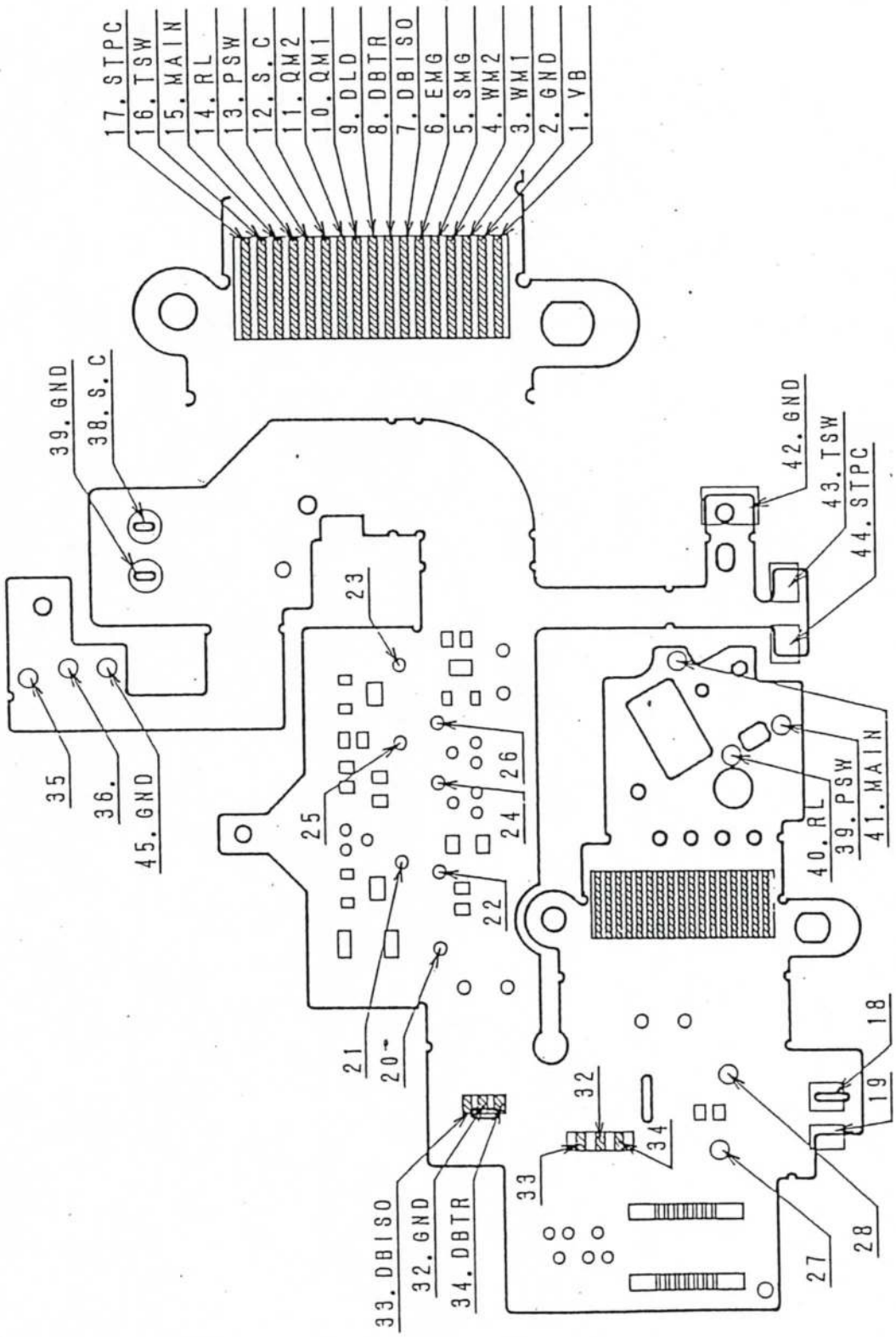
## 14-8. DV FPC/SCHEMATIC DIAGRAM



# 11-9. DV FPC/PARTS ARRANGEMENT



11-10.DV FPC/TERMINAL NAME



Your Mark of Quality

RICOH